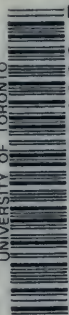


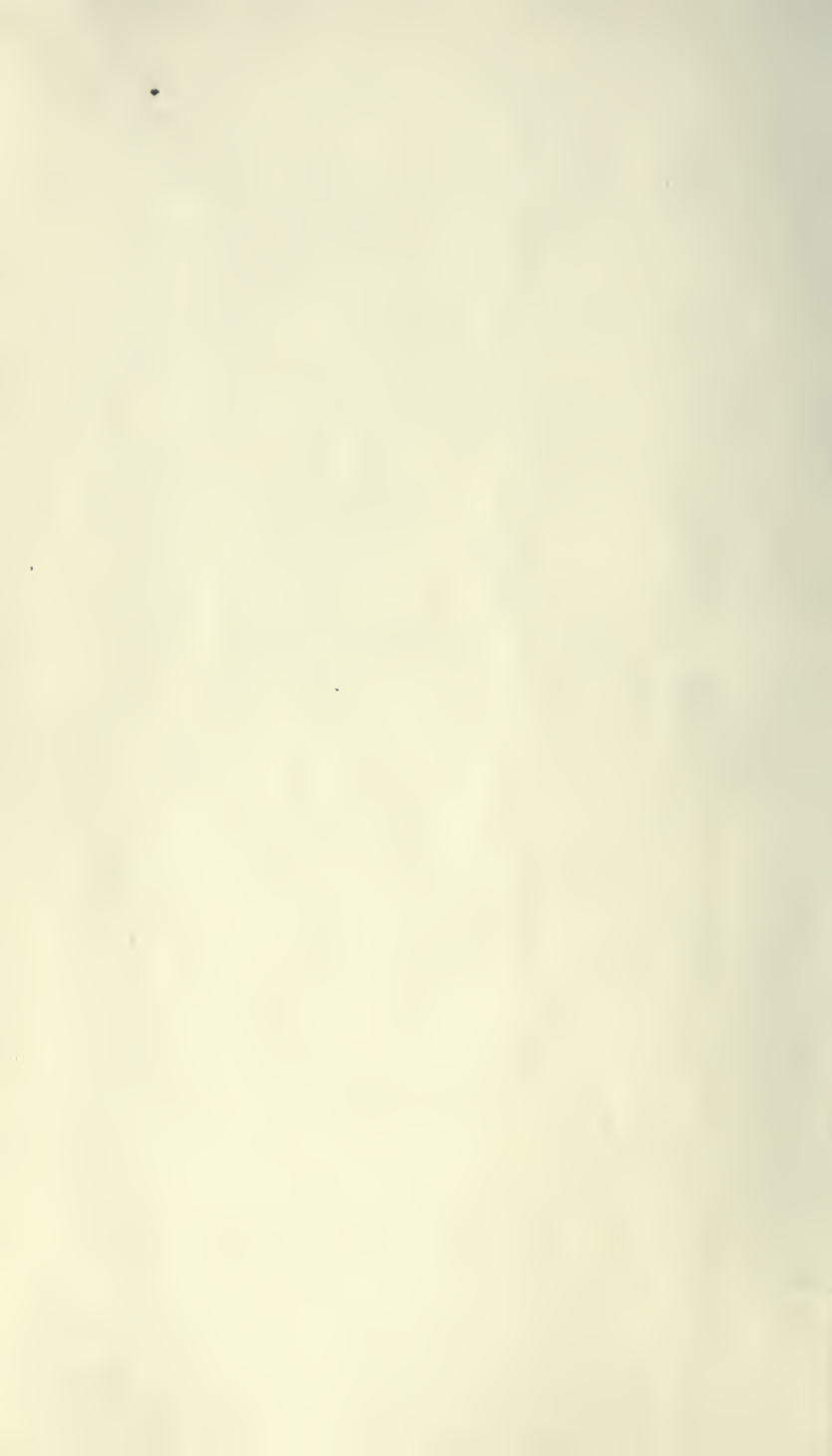
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AUTOBIOGRAPHY

OF

GENERAL SIR JOHN HENRY LEFROY.



SIR JOHN HENRY LEFROY.

AUTOBIOGRAPHY

OF

GENERAL SIR JOHN HENRY LEFROY,

C.B., K.C.M.G., F.R.S., ETC.

COLONEL COMMANDANT ROYAL ARTILLERY.

EDITED BY

LADY LEFROY.

"Not slothful in business, fervent in spirit, serving the Lord."

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INTRODUCTION.

THE following autobiography was written by Sir Henry Lefroy, chiefly in Cornwall, during the years 1886-89. A severe illness in the spring of 1885 had obliged him to leave London and seek rest in a milder climate ; and although he recovered to a certain extent, he never regained health, and his life was more or less that of an invalid.

The change from busy life in London and daily intercourse with clever and thoughtful men was trying and unwelcome, for his mind was as clear and bright as ever, full of energy and interest in scientific pursuits and in all that concerned the welfare of his country and especially of his own beloved regiment, the corps of Royal Artillery. He took great delight in the beauty of Cornwall and in the semi-tropical plants that have been acclimatized there, and enjoyed exploring new paths on his pony when fine weather enabled him to be out of doors ; but he felt the sudden cessation of active mental work and interests, and the writing of recollections of his life was suggested as a resource and occupation for quiet days.

Although he felt keenly the absence from old friends, he was always cheerful, ready to be interested in everything that came before him, always thankfully acknowledging the many blessings given to him, knowing and owning that the God whom he had served so long was still leading him and ordering all things as was best for him in all ways.

Some extracts from letters have been added which may show, as an autobiography cannot show, the earnestly religious tone of his mind from the time when he joined the Royal Artillery and came under the influence of an eminently religious man, the late Dr. Olinthus Gregory ; and some passages in them may bring into notice the great humility and sincerity of his character, joined to utter fearlessness in carrying out whatever he judged right, whether as to moral or professional matters.

As a proof of his love for his regiment, it may be mentioned that during the last weeks of his life he was in correspondence with two distinguished officers of the Royal Artillery, urging them to collect and publish records of the late war services of the corps before the recollection of those services had faded or the survivors now living had passed away. He had no war service of his own to record ; his desire was simply to have the credit of the corps kept up.

It is not possible for the editor to sketch the character of one who so entirely made the brightness of his home, without incurring the charge of partiality, and she has therefore added at the end of the volume some reminiscences from friends and extracts from a memoir written by Major-General Sir J. F. Maurice, R.A., K.C.B., for the Royal Artillery Institution.

To all those friends who have given kind assistance in the preparation of this memoir the editor desires to express her grateful thanks.

C. A. L.

LEWARNE, CORNWALL.

1895.

AUTOBIOGRAPHY

OF

GENERAL SIR JOHN HENRY LEFROY.

[The first pages of the following Autobiography were written in 1858, but pressure of business at the War Office obliged Colonel Lefroy to put aside the work of writing his recollections, and the task was only resumed in 1886 in Cornwall.]

CHAPTER I.

I WAS as near as can be the age that my little son Frazer is now, namely, six years and a half, when my father died on 9th May, 1823. Nevertheless, I have very little personal recollection of him—a faint vision of a tall, grave, slender clergyman is impressed on my memory. I remember looking furtively round at prayers sometimes in the morning, and being awed by his clasped hands and earnest manner. Once I recollect his putting me playfully down into a kind of vault there was under his study at Ashe, reached by a trap door—a small cellar, to my great alarm ; and I well recollect the solemn hour when he lay in his coffin in the dining-room of the same house—the weeping, the smell of burnt perfumes, my mother's mute agony, and the baby brought down to provoke her tears, and my brother Charles's more violent grief—these are almost all that remain, after thirty-five years, of him whom I hope to know in Heaven. Perhaps the father of five girls and six boys has not so much attention to bestow on each, as I can spare for Frazer ; perhaps, as indeed I think more than likely, I was not so pleasant a child, and came in for fewer caresses ; but at all events, I feel disposed to leave that behind me, by which my children, if it please God to leave any of them fatherless at an early age, may know more about me than I know about my father, and may have

some certain authority for the vague impressions and unconnected facts of which a memory is most likely to survive.

The Vicarage of Ashe, near Basingstoke, was bought by my grandfather for three lives. Here he died of a paralytic stroke on 13th January, 1806, in his sixty-first year, having survived his charming and gifted wife but little more than twelve months. She was a sister of Sir Egerton Brydges, and had all his talents. Singularly sprightly and lovely is her portrait, of which I have an engraving. In Volume VII. of the "*Censura Literaria*" of Sir Egerton Brydges there is a memoir of his sister, Mrs. Lefroy. He speaks of her in terms of extraordinary love and admiration, and records, amongst other things, that she vaccinated eight hundred poor people with her own hands. She died on the 16th December, 1804, from the effects of a fall from her horse the previous day, more missed and lamented than often falls to the lot of a country clergyman's wife.

My father thus succeeded to the Rectory of Ashe, Hants, worth about £350 a year, in 1806; and here, his fourth son, and sixth child, I was born on 28th January, 1817, so near midnight that my mother annually revived the doubt whether my birthday should be kept on the 28th or 29th. Probably the very earliest event I can remember, and I do remember it distinctly, is the great robbery which took place in 1821. It was at Ewshott, which had been left to my father by Mr. Maxwell (his uncle by marriage) in 1818. The whole family was there on a visit from Ashe. I recollect arriving very well, and how good we children thought the baker's white bread sent up from Crondall. There had been some repairs in the house, and one of the workmen put some London burglars up to the value of the plate, and how to obtain it. They entered by cutting a hole in the centre shutters of the drawing room (where it may be seen to this day, bells having been added since), there was nothing then to prevent their drawing back the bolts, which they did, and made a very clean sweep of everything of value on the ground floor. My mother came to announce this to us in the nursery as we sat at breakfast in the morning, wondering why there were no teaspoons.

It is odd how some trifles stick to the memory. I recollect the indignation at the burglars having spoilt a plated inkstand by wrenching off the solid silver rims; how they were said to have emptied the tea-leaves out of a teapot on the carpet regardless of manners, and how it was inferred that one kept watch at the foot of the staircase, by a hedge-stake that was found there.

The next event in my very early recollection happened a year or two later, but before my father's death. It was the suicide of the

footman, William Nash. He cut his throat in a fit of despondency, having previously used dark language to his fellow servants.

There is one other event which I have never been able to identify, which left a strong impression on my mind, before I was five years old. The house at Ashe was separated by a lane from a large meadow, round which ran a shrubbery, and a walk which terminated in a wicket gate on the high road. One day we encountered, passing this gate, a long mysterious train of soldiers in long cloaks. It had probably been a wet day, and they may have been merely troops on the march, but I have never forgotten those horsemen, or the awe and wonder they created in my childish mind. I had a vague idea for a long time that they were returning from some Royal funeral, but I do not know that any occurred about that time. (P.S.—It was the funeral of the Duke of Kent.)

My father died on the 5th September, 1823. My eldest sister and my brother Charles doubtless remember a good deal about him. I do not, nor of my eldest brother George, then sixteen, who survived him but six months. I recollect the latter, however, at Ewshott, punching my head for not learning my Latin grammar, which few people now expect boys of six to learn, and this marks one of the points on which common-sense has made an advance since those days.

Ewshott, when my mother moved there, desolate and sorrowful, with her eleven children, in 1823, was a very different place from what it is now.

It used to be called Itchel, a very respectable ancient name, for the *Icales æwelmas*, or Itchel, springs are quoted in a charter by Edgar, A.D. 976, which deeded the lands in the parish of Crondall to a Saxon monastery at Winchester.¹

Mrs. Maxwell quarrelled with the name, parish tradition says, on account of a certain cutaneous complaint that appeared in her household, of which it reminded her, and she induced her husband to adopt that of the Tything of Ewshott, in which it is situated. That must have been seventy or eighty years ago; but the poor around never adopted the new name, and lately my brother Charles (1857) has tried to revert to the old one.²

Ewshott seems to have changed hands pretty frequently. Mr.

¹ C. M. Kemble, "Codex Diplomas," Charta DLXIV., vol. iii., 1845.

² In 1881, as Governor of Tasmania, I named a new township "Itchel." The inhabitants after a time respectfully represented that they did not like either the first part of the name or the last! They begged it might be changed to "Lefroy," which it was.

Maxwell bought it of "Squire Linwood"; Linwood bought it of "Old Bathurst"; he bought it of the Gifford family.

"Squire Linwood" is that hard-featured, ill-looking man in a leathern hunting coat, with a heavy whip in his hand, whose portrait hangs in the Hall. He has left a villainous reputation behind him, and, strange to say, that picture has a tale, for it was discovered by my father bricked up between two walls, in the course of some alterations he made in the drawing-room, so my mother tells me. (It was in a panel, and probably not thought worth removal by Mr. Maxwell when he made the wall.) In my boyhood we had a ghost in the house, and this old squire was suspected of having something to do with it. I have not heard the ghost for many years. The story will probably long survive the fact, as people do not like to give up a mystery; so I will tell you what sort of a ghost it was.

There had been an old farm-house at the back of Ewshott House, and while that lasted neither household took much notice of nocturnal noises, each supposing them to proceed from the other; but after it was pulled down, it came out casually that both had often heard them, and wondered what they were. The villagers on their part knew well enough that Itchel was haunted, and old Wingate, a drunken old fellow, who was employed as night watchman whilst the premises were exposed by the alteration, affirmed on his veracity that he saw the ghost one night, like a white peacock; and it must have been a ghost, because all the peacocks about the place were blue. After this we became more alive to noises, and it is undoubtedly true that for many years there were long unaccountable noises heard. They were called "the Thumps," the most usual sound being exactly like that of a heavy muffled blow, repeated several times, struck against the floor or wall. They were sometimes earlier, sometimes later, but commonly about midnight. I have heard them dozens of times. We never could find out what caused them; no two people could agree as to where the sound came from. We often took pains to ascertain. Nothing was more common when we were sitting late than for some one to say, "Listen, there's the ghost!" and sure enough we heard him. My mother used to declare that she often heard heavy steps; I never did. The mythical version of the story may be read in "Bealing's Bells," a little book got up by Major Moor for a bazaar in 1841. The purpose being so good, neither the major nor his chief informant, my sister F., felt it a duty to *understate* the wonder: perhaps they allowed imagination to have rather more scope than I can venture to do in an historical statement like this.

I went abroad in 1839, and remained absent—with exception of a short visit in 1842 and others in 1846 and 1850—until 1853. I do not remember distinctly to have ever heard the ghost since 1839, but others have done so.

In 1826 I went first to school in Alton. My mother had brought her old blue chariot from Ashe, and she took posters and drove over ; but, as good luck would have it, a spring broke as we were going through Crondall, and I had some days' respite. It was a bad school. I distinctly remember some traits of it which would seem hardly credible if I could write them. There were many vulgar, low-bred boys, and the master was hardly a gentleman, but he ground Latin grammar into us very well. George Bennett, of St. Helena, and Anthony Benn, now a colonel of Artillery, and W. Stevens, a clergyman, are the only boys I have met in after life. The first I remember as a little, timid, dark boy, exciting my compassion much by being so far from his home. The second I chiefly remember as he appeared threatening me with a licking for making a hole in the cricket ground to sail a small boat. We had a famous playground, and took long country rambles, when the great amusement was to play conqueror with snails' shells. On the 29th May we used to get up at daylight and go to Chawton Wood to gather oak branches, especially prizing oak-apples.

Chawton Green, by the bye, is the only place where I remember a regular celebration of May Day, with a maypole and rustic merry-making. Chawton House was a fine old place, with a labyrinth in the grounds. One of the old family pictures was a source of great awe, not to say terror, to me, by reason of a story that it once had got out of the frame and walked about !

While I was at Alton my mother had the offer of a midshipman's berth, and also of a cadetship for me, and left the choice to me. I had no fancy for the sea, and Divine goodness guided a boyish choice to the profession in which I have since had so many reasons for thankfulness. I believe it was a sister of the Duke of Wellington who married my mother's cousin, Sir Charles Smith (Lady Anne Smith), who got the nomination : no bad thing in those dark ages, when the State most absurdly gave a gratuitous education at both the military schools to the favoured few who had the interests to get into them. This was the rule down to 1831. My education, therefore, cost nothing after the age of fourteen, except the small charges for books and extras.

CHAPTER II.

MY mother moved me in 1828 to a school which had a high classical reputation at Richmond, Surrey, kept by Rev. C. Delafosse. His wife was an early friend, a sister of Mr. Quilter, and was the one good influence at the school. Few, indeed, there can be of "her boys" who trace no better thoughts and heavenward aspirations to her fervent prayers, family, social, private or secret; her more than motherly tenderness and care; her refined and feminine, yet bright and energetic, spirit. We had no great respect for —, but for "Madame," as she was called, our respect was unbounded. We knew her to be as good as she looked.

Mr. Delafosse was one of the chaplains to the Duke of Cumberland, afterwards King of Hanover, who was then residing at Kew. "My friend the Duke" frequently visited him with Prince George, the present King, who was then a boy of my age. We used to think our playground greatly honoured when they were to be seen in it. Notwithstanding this distinguished patronage, we were not an aristocratic school. Lord Cranley was the only peer's son: how they did "My Lord" him!

In this large school we almost all slept two in a bed—a practice which is now almost unknown in civilized life. I had occasion in 1843 to sleep at a country tavern in Cherry Valley, in the State of New York, and narrowly escaped it. The landlord, seeing that I was an Englishman, very good-naturedly told me that I should not like to sleep with any of the other gentlemen, and so he had made me up a bed on the kitchen table! There was one drawback which he omitted to point out; the table being too short, the pillow kept slipping off the end of it, and down came my head with a crack against the edge of it. Otherwise I was very comfortable.

In 1828, my youngest brother Frederick died at Ryde, where my mother was staying—a dear little fellow of about seven and a half years; and I should have mentioned that in August of the previous year we lost my sister Lucy, aged eight years, a beautiful little girl long and fondly remembered. Thirty years have now elapsed. My mother survives, with eight sons and daughters, and twenty-four

grandchildren to perpetuate the family. Death has not yet entered our circle again ; no great misfortune has befallen any of us. Our troubles have been traceable, nine times out of ten, to our own faults or foibles, or peculiarities. I can trace a silent flow of Divine mercies and Providences which wonderfully illustrate the promises of God to the seed of the righteous ; for my father was a good man, far in advance of the clergy of his day in what are now called Evangelical principles ; and although I do not think he would have joined the Evangelical party of recent times, as being too moderate and too well grounded in sound theology, most assuredly he would have sympathised ardently in their crusade against the sloth and formalism and philo-Romanism to which they are opposed. I hope you will all grow up with minds capable of taking a middle course between the extremes to which the spirit of disputation hurries so many well-meaning people ; that you will remember that “in Christ Jesus there is neither circumcision nor uncircumcision (much less High Church or Low Church), but a new creature” ; that “if any man have not the Spirit of Christ (no matter what else he has) he is none of His” ; that before any man or woman is fit to take a side in religious controversy, he or she should be sure that obstinacy, and ignorance, and self-will are not more influential than love of the truth, and the guidance of the Spirit of Truth. It is surprising to reflect how many people would hold their tongues were these principles more generally recognized, and consequently how much greater the chances would be of the truth prevailing.

But if the year 1828 was marked by some affliction, it was also marked by family happiness. Your Aunt Anne McClintock won the heart of a gentleman she met at Ryde, now your Uncle John McClintock,¹ and before very long they were engaged to be married. He was the eldest son of a gentleman of large fortune in Ireland, had been in the 74th Regiment, and was then a major of militia. It was a very good match in a worldly point of view, and has proved so in every other. My uncle Edward Lefroy came home from his post of British Commissioner and Judge of the Mixed Court for the suppression of the slave trade at Surinam about this time, very flush of cash and extravagant in his notions, by which your Aunt Anne profited. She was married the following year, 1829.

To go back to Richmond School. I was there two years, and got pretty well grounded in Latin and Greek, but very little else. I had a fancy for Greek, especially Homer, but never could understand

¹ Afterwards first Baron Rathdonnell.

“derivations,” which in the stupid fashion of those days were required of us, without any attempt to explain the structure of the Greek language, the common combinations, or the nature of the roots we were set down to discover. I do not think we had any boys of remarkable talent at the school, and I remember very few of them ; but never having been at college, I have not had the opportunity of keeping up my school acquaintances. There was a wretch of the name of —, whom I remember for the vile language he used and the evil influence he had. There was a poor fellow almost blind, named Orme, and I am ashamed to think how cruelly he was used by the other boys. This must have been because he was a great bully of little boys himself ; nevertheless, I doubt if the same treatment would be possible in any great school now.

Political storms pass lightly over a schoolboy's head. I remember the battle of Navarino fought on 20th October, 1827, but whether Mr. Canning or the Duke of Wellington ruled was a matter of great indifference at Mr. Delafosse's. The return of Daniel O'Connell for Clare, which fevered all England, and the subsequent excitement, which ended in Roman Catholic Emancipation, shaking the country to its foundations, have only left a hazy recollection of loud arguments and impatience for the newspaper. The institution of the police—the “new police,” as it was called so long—made more impression. We had a vague idea that we were being enslaved somehow, and lamented the old “Charleys,” as they were called, who had so long represented the law. Shakespeare's account of Master Dogberry's watchmen will give you a very good idea of what they were.

My examination for entrance in the Royal Military Academy took place in January, 1831—a very different thing it was from modern examinations. I was sent up to stay with Mr. Quilter (my guardian), who was living in the very same house, No. 1, York Terrace, which you knew in 1859, and had the very same servants, Michael and Mary. Michael was charged to show me the sights of London, and I have never quite forgiven him for not showing me old London Bridge, which was then standing, although it was pulled down the following year.

It was the regular custom for all cadets to join at Woolwich on Sunday, and accordingly I did so ; but Mr. Quilter, being a good man, was shocked at this unnecessary desecration of that holy day, and wrote to General Drummond remonstrating. This led to the rule being altered, and shows what can be done by faithfully bearing testimony against evil practices, provided it is borne in the right spirit, in the right way, and at the right time. The truth is that the

old irreligious spirit and disregard of the Sabbath, of which you read in books describing the manners of the last century, came down a long way into this one. Not only were Sunday dinner parties frequent enough, but it is a fact that the scientific weekly meetings of the Fellows of the Royal Society at their President's house were regularly held on Sunday, until Sir Humphry Davy changed them in 1820 to Saturday. Old Sir Joseph Banks, his predecessor, the companion of Captain Cook, thus spent his Sunday evenings until his death. You will read in Hannah More's "Life" how Bishop Porteous once asked her prayers for the success of an undertaking he was about to enter upon, and about which he was excessively anxious. This was to speak to the Prince Regent and ask him not to give his great parties on Sunday!—and he did speak, and God prospered him, for the Prince promised to give them up.

I have not much to tell you of the four years, 1831–4, of my cadetship. I was the smallest boy but one of my division, and centre of the rear rank. The cadets wore long-tailed coats, called coatees, some of which still had white facings; the facings of the Artillery had been changed from white to red but a year or two before, and Lynch Talbot, one of the subalterns of the company—a subaltern of twenty-one years service!—still wore the coat with gold embroidery of the oak-leaf pattern and only one epaulette. Parker, the captain of the company, commonly called "Peg," because he had lost his leg at Waterloo, and had a wooden one, had been twenty-three years a captain, and remained one six years longer! How we used to run if we heard that "thump, thump, thump," and the inarticulate growl that seemed to precede him. *À propos* of him, I must tell you that having suffered dreadful pain from his wound for more than thirty years he underwent an operation in 1849 or 1850 under mesmerism in the hope of getting rid of it. He did so for a time, and he described his feelings as a "heaven upon earth." But the neuralgia returned, and he died in 1851, worn out with suffering. He was rendered entirely unconscious during the operation.

The moral state of the academy was very shocking at that time. Swearing and abominable language prevailed to a frightful extent, and nobody seemed to think of checking it. There was no chaplain, or any attempt at religious instruction. Good old Dr. — had no moral influence, which he used to lament. The first person who really introduced a higher tone was Captain (afterwards Major-General) Eardley Wilmot, long after my time. In one thing we were better than some of our successors—the code of honour as to arrest was so high that I never knew a cadet knowingly break his arrest, although it

was considered lawful to stretch one's fullest length out of the place of confinement, provided that one toe remained within. It was drawn as fine as the saving one's ground at cricket. There was also a strict conventional limitation as to what might be honourably stolen, or, as we called it, "smouched"; generally speaking, everything furnished by the Institution, whether books, instruments, even clothing (but this was well watched by the servants) was fair prey, but private property was respected. There was not much gross bullying, but fagging (or "neuxing") was regularly legalised. A cadet was a "neux" for a year; during this time he was not allowed to carry a cane, or to wear straps to his trousers; he did all fetching and carrying for the rest of his room; he trotted up and down to Jones's Library for novels; he fagged at cricket, and, in short, did whatever he was bid, and was kindly treated or tormented according to the character of his No. 1, or the head of his room.

A boy joined the academy six months after me, whose story you should know. He had never been at a school, but had been brought up by an old aunt. He was naturally very shy on coming among so many boys, and did not understand their ways; in particular he was much surprised to observe that none of them seemed to say their prayers before "lights out" was called round the barracks. However, after waiting to see if any call to prayers was coming, he knelt quietly by his bed and said his own. It was a thing that no one had ever seen before—a boy kneeling down to say his prayers in a barrack room! "Here's a young Methodist," shouted all the rest, and they began to throw boots at him, or whatever came handy. Nevertheless, he persevered; no persecution frightened him from his custom and duty. He never fought or resisted, but quietly went on, do what they might. One day a big brute named —— dropped a quantity of melting sealing-wax in the palm of his hand. He did not make a complaint to the officer. After a year or two the other boys all said what a shame it was to bully John Burrows; everybody secretly admired his courage and consistency. Whether any imitated him I cannot say, but he was universally looked up to and respected. You knew him in after life as Colonel Burrows, and nobody ever spoke of John Burrows (his name was really Arthur, but we called him John) without respect.

I should have told you of an event that happened during one Christmas holiday while I was at Richmond school. I was a boy of nearly twelve. We had drawn our chairs round the fire one evening after dinner, when your Uncle Charles, then eighteen, who with your Uncle Anthony and old Vass, the gamekeeper, had been out shooting

all day, asked us to guess what he had found. Nobody could guess ; so he produced a small paper out of his pocket, and, unfolding it slowly, showed us a whole handful of small glittering gold coins, 103 in number, which he had been so lucky as to find in a turf cutting on Ewshott Common, near Boarley, on a part of the property subsequently (1855) purchased by Government for the Aldershot Camp. I need not describe our wonder and excitement, or the coins, of which you may read a full account in the "Numismatic Chronicle," No. xxiii., 1844. Those which can be identified belong to the French kings of the Merovingian dynasty, A.D. 486—752. There is one, No. 7, of

"Le bon Roi Dagobert,"

who—

"Avait sa culotte à l'envers,"¹

or at least was struck by Saint Eloy, his moneyer, who lived about the middle of the seventh century.

Ages before the Norman conquest probably some Saxon traveller, returning from France, lost his purse, and very likely his life, on that wild heath of Wessex. There the coins lay for centuries until a poor turf-cutter turned them over in a sod of turf ; but not observing them, left them to be found by the first passer-by, and your Uncle Charles, who as Lord of the Manor had the best right to them, had the good fortune to be the person. The coins weigh from 18 to 20 grains each, worth about three shillings.

The last year of my stay at Woolwich was signalised by an audacious outbreak, in which I took part, but luckily escaped the consequences. A number of us, with infinite pains and labour, succeeded in unscrewing one of the heavy iron window gratings ; it was the one in the upper passage, first division. We lowered it, let ourselves down out of the window, and went to Greenwich Fair. What a weary, stupid thing it was at that hour (midnight) when we got there. The noisy booths filled with the lowest of the low, everything respectable shut up in silence and darkness, nothing to see or do except drink bad beer or spirits, which we none of us wanted, and

¹ "Le bon Roi Dagobert avait sa culotte à l'envers

Le Grand Saint Eloi lui dit 'O mon Roi !

Votre Majesté est mal culottée.'

C'est vrai, lui dit le Roi, je vais la remettre à l'endroit.

Le bon Roi Dagobert avait un grand sabre-de-fer

Le grand Saint Eloi lui dit 'O mon Roi !

Votre Majesté pourrait se blesser.'

C'est vrai, lui dit le Roi, qu'on me donne un sabre-de-bois."

then to walk four or five miles back, tired to death, and secrete ourselves in the racquet court until the barracks were open in the morning, quaking for fear we should be found out. And found out we were. The grating was so heavy that it had bent a little with its own weight, and all our efforts could not make it fit again. The sharp eye of old Lynch Talbot saw something amiss. "Eh ! what's this ?" said he, poking out a pellet of bread with which one of the screw-holes had been stuffed. So as it was quite impossible that such tricks could be played unknown to the corporals, they were forthwith placed in arrest until the true culprits should be given up, and an awful inquisition was made by "Peg." Of course he found it all out. Barker, afterwards Sir George Barker, and others were broke, minor culprits sentenced to black-hole, drill, arrest, and I do not know what all, and I alone escaped. Happening to belong to another division no suspicion fell on me, and the corporals did not feel it necessary to give me up.

The only thing I was good at at the academy was fortification and plan-drawing. I learnt a little mathematics under Christie, none under Gregory or Barlow. I mean that with them I only went mechanically through the courses, and was imperfectly grounded in what I thought I knew. Christie alone in those days really thought, explained, and examined. Poor George Warburton¹ ("Hochelaga") did me more good by a little clear explanation one night before an examination than a whole half-year of Barlow. I have always felt that it was mainly through him that I succeeded in getting into the first academy, which was tantamount to getting a commission ; nobody failed afterwards. However, I came out first in fortifications, which, perhaps, was just, and second in mathematics, Burrows being first, and this I have always attributed to amiable partiality of Gregory's. We were neither of us to be compared to Hawkins, now of the Engineers, or one or two more.

I earnestly entreat my children to see to it that they really know what they profess to know. Examine ! examine ! examine ! try every link of the chain, especially in mathematics—prove everything ; this alone is sound knowledge which gains strength with time, and gives certainty to everything that is built upon it. Of all intellectual bad habits, the sloth or weakness which shrinks from the labour of sound

¹ George Warburton was younger brother to Eliot Warburton, author of "The Crescent and the Cross." They both had a sad fate. Eliot perished in the burning of the *Amazon*. George left the artillery, married, became Member for Harwich, and one day, without any conceivable motive for suicide, was found with his throat cut, October 23rd, 1857.

acquirement and prefers a lazy, delusive, superficial progress, is perhaps the worst. It has been my bairn. I wish to warn you against it.

“There’s a divinity that shapes our ends,
Rough hew them as we may.”

It was my ambition to obtain the Engineers, and I should probably have done so, but for a black eye with which I went up to the examination, and for which decoration I had to thank Chapman, now Colonel Chapman¹ of the Engineers—a very distinguished officer. A nefarious attempt of his to rob my table of a very crusty loaf had led to an exchange of blows; he being the aggressor was kept back one term. I was sentenced to the Artillery, then, and long afterwards, a sort of penal corps in the eyes of the authorities;² but mark how little we know what is for our good! No officer of Artillery of my standing has had such long continued good fortune, or been so much employed; for twenty years, with an interval of about eight months in 1853, I have held beneficial employments which I should probably never have attained in the Engineers. Chapman, who did not want that corps, was put into it as a sort of compensation for losing half a year, and he turned out one of its distinguished officers.

These are lessons of which life is full; well for us in youth or age, when we learn them sufficiently to “be careful for nothing, but in everything, with prayer and supplication, to let our requests be made known unto God,” and leave them in His hands. It was a bitter disappointment. I now see it as a mercy, and so of every other disappointment not directly traceable to my own faults or folly, which I can recall. “Goodness and mercy have followed me all the days of my life.” It is not for nothing that these or any of the promises are put into the Bible, but that we should accept them, rely upon them, use them, and plead with them.

You will have heard me speak of old Mrs. Boham. In 1783 she was young Hester Boham, and came to live with my grandmother as her lady’s maid. She used to tell how she rode on a pillion behind a manservant from Odiham to Ewshott on her first visit; there was no carriage road. My grandmother was killed in 1804 by a fall from her horse, and in July of the following year, when my father brought home his young bride, for she was only twenty-three, Hester was transferred to her service. A true and faithful servant she proved, and in 1834, after having been fifty-one years in the family, she died.

¹ Since then General Sir F. Chapman, G.C.B.

² Major-General Lewis, R.E., was obliged to resign his appointment of Governor in 1857 for avowing this a little too broadly.

My mother lamented her as we lament those who have shared life's good and ill with us, and whom life never replaces. "Neglect not an old friend, for a new is not comparable to him"; the world is not changed since Solomon's time. We youngsters had begun to complain of the old lady's tyranny; but I remember when my greatest treat was to take tea with her in the little housekeeper's room, and my greatest exploit to succeed in robbing her cupboard of cold plum pudding. Latterly I was not a favourite. I had the misfortune to shoot an asthmatic old spaniel named Dash that she and my mother were much attached to because it came from Ashe, and nothing could ever persuade her that I did not do it on purpose.

There were one or two other things that happened while I was a cadet which I must mention. One day, 26th June, 1832, the artillery were firing as usual on the common, and we cadets were standing, as we thought, safe out of the way, when a howitzer shell came straight towards us. Norman Bull was lying down under an oak-tree (it was the most easterly tree near the road, high up the common). At this moment, "Get up, Bull," some fellow shouted, "here's a shell coming." He tried to rise, but it was too late; the shell struck him on the hip, and injured him so severely that he died in a very few days. This accident made a great noise at the time. His father, who was then living, was the commander of the famous "Bull's troop" of horse artillery—the howitzer troop at Waterloo. The ancients would have supposed Nemesis to have had something to do with it.

Another recollection is of the same character. H., the man I named above, had a bosom friend named Pringle. This man and a friend one day took a boat to pull down to Erith; on their way back they overtook a straw barge sailing up with a fair wind, and to save themselves a little labour, made fast their boat to her and scrambled in, that is to say, H. scrambled in, for when after a little time he thought of Pringle, and turned to look for him, he was to be seen neither in the barge nor in the boat, but a little loose straw showed but too clearly that he had missed his footing and fallen in the river. The tide had swiftly and silently carried him away, but his body was recovered after some days.

We all thought it humbug and ostentation when H. was seen next morning at a very early hour pacing backwards and forwards in apparent distress, but in the most public place he could have chosen.

This man's subsequent history was curious and instructive. He came under the power of religious convictions three or four years later; he lost the angry, almost savage look which had become habitual to him, and gave all the external indications of a real change

of heart and character. He had married as a second lieutenant! He and another man, Fitzgerald, also a second lieutenant at the time, married the two daughters of Lieut.-Colonel P. I met them both in Canada in 1842. Fitzgerald had held fast his profession of faith, was conspicuous in works of religion, and well reported of by everyone. H. had abandoned his, was the subject of many scandalous reports, and ultimately justified them by deserting his wife and family, and running away with a governess, if I recollect right—someone who had been an inmate of the house. “Let him that thinketh he standeth take heed lest he fall.”

There was a remarkable boy among my contemporaries—a son of Dr. E. C. Clarke, the traveller—one of those good-natured, wild, mischievous, clever, idle boys, of which every public school furnishes an occasional sample; the terror of the weak and peaceable; could lick any fellow of twice his weight; he was a leader in everything except study, where he was nowhere. This boy, of course, came ultimately to grief; there was not the slightest chance of his obtaining a commission, and his mother removed him. His friends, however, managed to obtain a commission for him in the East India Company's service. Here he soon distinguished himself by his reckless courage. He was a companion of Lord Lindsay in his travels in Egypt and Syria in 1839; he was the life of that party. He returned to India, and raised a corps of Irregular Horse in the Belooch war, where he soon acquired the highest military character.

There is one other recollection of this period that I will put down. One fine evening in 1834, it was November, we were all called to look at an astonishing red glow over London; everybody speculated as to what it could be—some tremendous fire no doubt. There were no electric telegraphs in those days, but before bedtime or “tattoo” we knew sure enough that it was the Houses of Parliament that had been burnt to the ground; and you, who will recollect the scaffolding round the House of Lords, and the failure of the great bell, and the completion of the great clock, and the opening of the New Bridge, twenty-five years later, will thus be carried one step back in the history of the whole.

I joined the Artillery at Woolwich, 20th February, 1835.

April 14th.—I attended for the first time one of the weekly meetings for the purpose of reading the Scriptures which were held alternately at the houses of Sir John Webb, the Director-General of the then Ordnance Medical Department, and of Dr. Gregory. These meetings were composed mostly of young people, including a few young ladies, and some heads of families. We used to sit round, and

Sir John or Dr. Gregory would read and explain a portion of Scripture, and endeavour to elicit remarks from us, seldom with success. We opened and closed with prayer. There was a want of freedom about them, for Dr. Gregory was so full himself, so excellent and so immeasurably superior to the rest, that we were afraid to speak. The party was often too large, and I cannot remember that the other seniors ever said anything memorable. Nevertheless, I look back to these meetings with thankfulness and pleasure ; there could not fail to be a blessing in them ; many life-long intimacies date from them ; they united those who desired to serve God, and were a source of much encouragement to the young men, who like myself needed every support in wearing Christ's livery. They continued for five or six years.

April 16th and 17th, 1835.—Unusual occurrence of considerable falls of snow at Woolwich.

June 16th.—I was confirmed by the Bishop of London at St. Martin's Church, London.

June 24th.—Review of the garrison by King William IV.

Poor Queen Adelaide was dragged round on foot to see everything, and on getting near the Rotunda, being quite exhausted, she dropped down into a chance wheel-barrow she saw ! and refused to move.

August 8th.—A magnificent candelabrum of solid silver was presented to the mess by William IV.

(*May, 1887.*—The preceding pages were written twenty or twenty-five years ago. My life, beyond my expectation, has been spared to see my children's children, and the most important part of it has been of later years. At my dear wife's oft-repeated request I re-open the volume to record, if I can, the principal events in it.)

I did regimental duty at Woolwich in 1835, and the three or four next years. It was only varied by duties on detachment at Purfleet or at the Tower of London, which came round every few months. I was at the Tower when the Royal Exchange was burnt down in January, 1838, and also at the Coronation in the same year. Strange to say, no alarm was given at the Tower of that great fire (locally so near) ; the troops were not turned out, and we only heard of it next morning. My commanding officer on the second occasion was Major Sweeting, and he very good naturedly arranged, as he supposed, that I should be posted in Westminster Abbey to pass the signal, when the Crown was actually placed on Her Majesty's head, for firing the salute. He sent me there the day before (June 27th) to see the arrangements. I thus had the pleasure of seeing the Abbey dressed and decorated for this magnificent ceremony. My post was to have

been a sort of loophole just over the Throne, high up in (I suppose) the clerestory or triforium ; but, alas ! Sir Alexander Dickson somehow heard of this unauthorized exercise of patronage by Major Sweeting, and at the last moment sent some other officer, I forget who, and I was turned out to take the signal from him and pass it on to the Tower. I was posted on the centre of the then Westminster Bridge, in full uniform, to enjoy the jeers of the populace that came pouring in from Lambeth and the Old Kent Road.

Duty at Woolwich has greatly changed. In 1835 second lieutenants were still considered to be in a sort of pupillage. They were required to send in a weekly report accounting for their time, stating what reading or study they pursued. Of course these reports were in the majority of cases purely fictitious. They were never inquired into, or probably looked at. The event of the day was guard-mounting, for there were three if not four officers detailed for guard every day—viz., a captain and subaltern for the Main Guard, Royal Arsenal (there were no police) ; a subaltern for the East Guard, Royal Arsenal ; a subaltern for the Barrack Guard ; and sometimes one for the guard at the west entrance into the barrack field.

The beautiful ceremony of Trooping was invariably gone through in fine weather. The band played down to the Arsenal, and while the old guards were being relieved it played in the Arsenal, and also on the march up. There was thus a great deal of martial music to be heard daily, all of which came to an end at, if not before, the Crimean War, to the great loss of the community.

While the orders and regulations were as strict as ever, a great laxity of practice had crept in. Officers and soldiers were alike forbidden to take off any part of their dress or accoutrements on guard. The former, after they had made their rounds, and had been turned out by Grand Rounds, habitually undressed and went to bed, bedsteads and mattresses being provided for the purpose. I never gave in to this unsoldierlike practice, but used to take off my coat only. Indeed, at one time I made repeated attempts to sleep in my coat, epaulettes and all, but the thing was impossible. Epaulettes, as then worn, besides being absurdly expensive, were the most uncomfortable things, stiff, heavy, unyielding, making one's shoulders ache after a few hours. I contented myself with being able to turn out quite as quick as the guard could.

I was at this period one of the "methodists," or "saints," as they were called, the religious party at Woolwich. Our social centres, as I have already mentioned, were the houses of Sir John Debb and Dr. Olinthus Gregory. Our spiritual guide, whom, however, we

seldom saw except in the pulpit, was the Rev. Capel Molyneux. The fraternity consisted of Captain C. Manners, Captain Bell, Captain Lewis Robertson, Captain Bent, among the seniors (these were all Peninsula officers), Lieutenants Burroughs Tireman, Augustus Frazer, F. Eardley Wilmot, Arthur Burrows, Compton Domville, and at times several others. We used to meet every Friday in one another's rooms, by turns, for prayer and study of the Scriptures. On those days we did not, indeed could not, go to mess. Going very little into general society, we were, in fact, amongst the most regular attendants there, but some old opponents persuaded the Adjutant-General to the contrary, and to our amazement he issued a General Order, dated 14th November, 1836, reflecting severely upon certain officers, not named; who appeared to have mistaken their profession. The course thus taken was very unusual. The order hit a number of men who really did absent themselves, remonstrances were made, and it was almost immediately cancelled.

I am not prepared to say that our prayer meetings were very profitable, or our conduct always judicious. We did separate ourselves too much from other young men. The book then in vogue was Wilberforce's "Practical Christianity," which inculcated separation from the world as a first duty; it took an extreme view of the evils of Society, "worldly entertainments," and the like, as is still done by ultra-evangelicals, to whom we belonged; but we were all very zealous soldiers and conscientious officers. There were no better in the garrison, and we did not deserve a snub.

In these days, finding the soldiers' children living in the huts on Woolwich Common entirely neglected, we, with the sanction of the Commandant and the Chaplain, set up an evening Sunday School, which was very well attended. I may mention, too, that in September, 1836, an order appeared that the lodgings or quarters of the married men were to be visited by an officer every week. This was in consequence of a death by destitution, and some shocking disclosures of the condition of some of the soldiers' wives. I went my first round on 6th September. About the same time arrangements were made to give the men an evening meal. Previous to this there was no recognized tea, nothing between dinner at 12 and breakfast next day.

I fancy that there was a good deal of flogging. I find that I attended eight punishment parades between 3rd July, 1836, and 18th December, 1837. In one instance the sentence was 100 lashes, in all the others 150. I do not remember to have ever heard a man cry out under it, but I have seen young soldiers faint.

My dear friend Captain Manners—Charley Manners as he was called—a noble example of manliness and piety, to whose Field Battery I had been attached, left Woolwich for Weedon in May, 1836, to my great loss. With him went as his subaltern B——, another of our set, but who did not enjoy the same popularity. The only reason I ever heard given was that, having had the misfortune to lose his wife at Gibraltar, he sold off her wardrobe in an unfeeling way.

In October, 1836, I weighed nine stone four pounds only.

I began to take lessons in surveying from Captain Robe, R.A., who was the last officer of Artillery attached to the Ordnance Survey (long conducted under General Madge, R.A.); a number of us also arranged periodical meetings for professional study and improvement. I find that they held their third meeting in my room October 17th.

A heavy fall of snow is noted October 29th, six inches, with sharp frost. I was then at Purfleet.

An intimation was conveyed to the garrison in 1837 that the King “liked to see his officers at his Levées.” I suppose it was one of those times when he was unpopular, and that they were badly attended. I went to my first Levée on 22nd March, and was presented. His Majesty, however, took my breath away by saying, as I kissed his hand, as I thought in an angry tone of voice, “Who’s your father?” With deplorable want of courtier manners I blurted out “What?” “Who’s your father?” repeated the King. “He was a clergyman, your Majesty,” said I, and bolted as fast as I could. I imagine that he thought I was a son of Sergeant Lefroy (afterwards Chief Justice), then M.P. for Dublin University, whom he perhaps knew. C. W. Younghusband, who was probably the youngest and the smallest officer in the service, was presented at this Levée, and his round chubby face, beaming with boyish spirits, attracted so much notice that the Queen (Adelaide) called him into her circle. He was quite unabashable, of which I remember an illustration at a later period. He was staying at a water-cure establishment near Killarney, and the freak took him to disguise himself as an orange girl. He made a very pretty one, and his ready wit soon got all the community round him; then he offered to tell fortunes, and his intimate knowledge of everybody enabled him to make all sorts of humorous hits. The orange girl created the greatest sensation. I think he was not found out.

To go back to this Levée. Among others presented was an oldish subaltern, called “Butcher,” for his rough manners, his long hair, and a Newgate ruff of hair he wore round his chin. The King looked at him, and cried out, “Who’s this young man’s colonel?” Sir James

Kemp stepped forward. "Have his hair cut, sir!" says the irate King. Accordingly "the Butcher's" hair was severely cut to the laughter of the garrison.

The following letter, written to his youngest sister, and describing Queen Victoria's visit to the City soon after her accession to the throne, is of sufficient interest to be inserted.

"BROMPTON BARRACKS,

"*November 14th, 1837.*

"MY DEAR ISABELLA,

. . . "I will tell you about the Queen's visit to the City as far as I had any part in the proceedings. I went up to town that morning, worked my way from London Bridge to Sampson's, and returned to the top of Ludgate Hill, near St. Paul's, with him. Then we got into the very thickest of the crowd, and nice work it was. I got arm in arm with a special constable at first, and he managed in all the scuffling to make room for us, but at last he got away, and then an hostler-looking fellow hooked on to one arm and a man behind got hold of the other, and for about two hours we were pushed about; sometimes losing our front place by an inroad of barbarians from the other side, then gaining it again by dint of fighting. 'I say, old fellow, vich is hardest, your 'ip bone or my wrist?' said one fellow to me after he had had his hand wedged in for half an hour between me and Sampson. He wanted to put his hat on, which was coming off, but was obliged to ask another man to do it, as he had not room. Then there were a number of 'Ladies,' who had worked their way into the crowd, and then were appealing to our gallantry to let them through. 'Do have a little feeling, do, you brute!' said one of them to the man next me; but it was all to no good. It was as much as one could do to keep on one's legs, and all this lasted from about twelve to past three, when at last the little Queen came, and there was a desperate rush up the street, and I lost my place. However, I could still see very well over the heads of the others. I cheered with a zeal that could but have been highly delightful to Her Majesty, and she looked so pretty that she deserved it. It was a most animated scene. All the windows up to the top story were filled with heads and hands, cheering vociferously and waving, some handkerchiefs, some towels, according to the story. After she had passed the crowd in some measure retired.

In the evening Anthony, Tom and I walked halfway down the Strand with Julia and Mrs. Aldis to see the illuminations. There was hardly a house that was not lighted up, and many had gas lights, which are much more brilliant than oil; and what made the whole so

new was that the sea of heads below had attracted half London to the windows of the houses along the road to look upon it, the whole being nearly as light as day, though it was a dark night. I suppose there was a difference of ten degrees between the temperature of the lighted streets and of the others, partly from the crowd and partly from the innumerable lights. Anthony and I went over the whole line, and did not get home till past twelve. A holyday is so rare an enjoyment to the 'unwashed artificers' of London that this alone would make such a thing a great treat to them, but especially when it brought a chance of seeing the little lady whom everybody seems in love with. I saw her in profile, and it struck me that the print of her with a crown of flowers on, which they have at West Ham, was exactly like her.

"Captain Back's ship, the *Terror*, which has just returned from the Polar Seas, is here now. I went on board of her the other day. The sufferings the crew underwent and the labours they had to endure are almost incredible; the pressure of the ice would have crushed any ship not of the most extraordinary strength. As it was, the compression curved the beams of the decks so as to let the posts underneath fall out, and they were obliged to lash the two decks together. The worst of it was that they suffered as much from the heat below as from the cold above; they could not ventilate between decks properly, so that when they went up they stepped at once from an atmosphere at 70° or 80° to one of 40° or 50° below zero, a change of 110° or 120° which would kill most people. They cast mercury bullets in the bullet moulds, and when it froze they could take them up and fire them like lead out of a pistol, and fire the same bullet several times before it melted.

"We had an odd thing the other night here. The bugler of the 51st, who are in these barracks, awoke at twelve o'clock, and thought it was six in the morning. He got up and went into the square, and began blowing away the Réveillé with all his might. People thought there was a fire, and turned out with all haste, and had great difficulty in persuading him that it was not time, and in getting him to bed. I was wise enough to remain all snug where I was."

I feel that I should be ungrateful not to record the kindness of my dear old friend Lady Frazer during the broken periods of my residence in Woolwich. She and her niece "Charlotte," afterwards Mrs. Wood, and later Lady Hatherley, always seemed to regard me as a member of the family. She was as a mother to me; and during my short bachelor existence I usually went to her house every evening when

not otherwise engaged. As Mr. William Page Wood, afterwards Lord Hatherley, and I were, later on, joint trustees under the will of Augustus Frazer, whose residuary legatee I was, I was naturally associated in many sympathies with them. The Mary Lynn I have mentioned was another niece. Lady Frazer was not an intellectual person—I doubt if she ever opened a book—but she delighted in conversation; and having joined her husband after Waterloo, and remained with the army of occupation in France until it was withdrawn, she had frequently some interesting little anecdote to produce.

On the 30th March, 1837, I started for Antwerp, with my friends Augustus Frazer and “Billy Maclean,” a civilian, son of old Sir George Maclean, the Commandant. We started for a three months’ walking tour. My dear mother gave me £50; the expense was under £70. The spring was excessively cold and backward, and in going by Diligence from Brussels to Liège we were fairly snowed up not far from the latter place. About four o’clock in the morning the conductor, finding himself unable to proceed, recommended any passenger who could do so to make his way to a farmhouse, of which he pointed out the light, a mile or so further on, and Frazer and I started accordingly; but the snow was deep, we were continually tumbling into ditches or over fences, and were very much exhausted when we reached it. We knocked up the inmates, who gave us a most hospitable reception. The old mother turned her sons out of bed, spread clean coarse sheets, and made us turn in, and in the morning gave us a breakfast of coffee and brown bread. They spoke nothing but Low Dutch or Flamand. We were detained several days at Liège by the weather.

From Liège we went to Cologne, and I must recall for this generation the surprising fact that a public road or street then passed right through the Cathedral, at what are now the transepts, so completely dividing the unfinished towers at the west end from the lofty choir at the east end that it was difficult to conceive that they belonged to one building. If I remember right, the nave had not been commenced; only the choir, still surrounded with ancient scaffolding, towered high above the town, nearly as it appears now.

We went from Cologne to Langen-Schwalbach, then recently brought into great notice by the lively “Bubbles from the Brunnens of Nassau” of Sir Francis Head. After a delightful stay at Zum Raben for three weeks, we worked our way to Zürich, and thence to Chur. Here William Maclean parted from us; he fancied that he could not stand the fatigue. He was full of fancies, one of them

being a morbid dread of suffering from hunger: he never started without a private store of provisions somewhere. Though we liked him, we were not sorry when he returned; but to enable him to do so, we had to give him most of our ready money, from whence a curious difficulty ensued two or three weeks later.

After a visit to the Via Mala, Frazer and I shouldered our knapsacks and crossed the Julian Alps into the Upper Engadine, a district at that time almost unknown to tourists. We descended it to the Finster-muntz, then dipped into the Tyrol, avoiding Innsbrück from grounds of economy, and entered Italy by the magnificent military road over the Stelvio. Here our troubles began. Bormio and Sondrio were both places distinguished on the map by capital letters, and we made no doubt that we should find a bank at one or both where we could cash a circular letter of credit. There was no such thing. When we reached Bormio we had only just francs enough to pay the hotel, and when we got to Sondrio we had not a centime. We were attested by our passports to be British officers, we showed our useless letters of credit, and Frazer, who spoke a little Italian in addition to German and French, had a fortunate way of producing at the right moment a handsome gold watch that had belonged to his father. Finally, the hotel-keepers and postmasters recommended us on, one to another, and even paid the *trinkgelt* of our postillions until we reached Milan. I have often thought of this as a remarkable instance of confidence in the British character. Of course all claims were instantly discharged, with grateful thanks.

After a few days at Milan we went to the Lakes, and from thence over the St. Gothard to Geneva, where Frazer left me, having to hurry home. I stayed there a little longer, and there I found out and visited my grandmother's brother, Sir Egerton Brydges, an old man then, nearly seventy-five, who died not long after, when his baronetcy passed to his son John, who was of unsound mind, and at his death became extinct. Two of his daughters, Mrs. Holmes and Mrs. Todd, have left descendants.

It may be well to insert here a short notice of Sir Egerton Brydges, abridged from Sir Henry Lefroy's History of the Lefroy family, privately printed in 1868.

“Samuel Egerton Brydges was born 30th November, 1762, second son of Edward Brydges, or, as it was frequently written, Bridges, of Wootton Court, Kent, by Jemima, da. and co-heir of Dr. W. Egerton, Prebendary of Canterbury, Chancellor of Hereford,

and Rector of Penshurst and All Hallows, was M.P. for Maidstone 1812–18, and created Baronet 27th December, 1814. Of his family pretensions he has left us in no sort of doubt, for in his publication, ‘*Atlaviæ Regiæ*,’¹ he has, with astonishing research, succeeded in tracing his own descent from almost all the illustrious families of Europe. He conducts us by twenty-two descents from William the Conqueror to his own birth in 1762. Three more generations bring us to your cousin, C. J. Maxwell Lefroy—giving an average, from A.D. 1087 to 1861, of thirty-one years to a generation. The book contains CXL. tables. It will be seen, if we trace back the families successively named . . . and then in turn follow back every opening presented by an illustrious marriage, the thing may be carried to almost any extent, failure of historical materials and the coalescing of different lines being the only limiting causes. One of the lines is conducted through Charlemagne to Pepin, father of Charles Martel, A.D. 714 (Table LXXXVI.), and even this is not the earliest date. I regret to record that Arnoul le Mauvais, Duc de Bavière, who died A.D. 637, lies at the root of the tree. Sir Egerton Brydges drew his material chiefly from ‘*L’art de verifier les dates*,’ edit. 1818, by Saint Allais. . . . He availed himself, however, of his own early labours in genealogy, and of all other accessible material, and I am not aware that the authority of the work has ever been called in question.

“The great disappointment of his life was the rejection of his elder brother’s claims to the Barony of Chandos in 1803. It cankered his spirit, and loaded him with a sense of injustice and wrong. To the end of his life (his elder brother having died without heirs) he claimed the title, and frequently signed himself, ‘*per legem terræ*, Chandos of Sudeley’” . . .

“In 1837 he was a great sufferer, and in painfully straitened circumstances, an unhappy man ; heraldry and genealogy were still his ruling passions. He complained much of literary starvation at Geneva, but conversed cheerfully, though with some difficulty, and greatly appreciated two or three not very new stories I was able to relate—among them the then famous *mot* of Sugden on the Greek correspondence of Lord Chancellor Brougham with Lord Wellesley, which had not reached Geneva, “If he did but know a little law, he would know a little of everything.”

From this visit to Geneva dates much of the happiness of my life.

¹ See “Autobiography, &c., of Sir E. Brydges, Bt., Baron Chandos of Sudeley,” two vols., MDCCCXXXIV.

Going to the Diligence office to secure a place to Paris, I was accosted by a tall soldier-like man of five-and-forty, who, with his son, a lad of my own age (twenty), was then on the same errand. He soon found out that I was a young Artilleryman, and introduced himself as Major Dundas. He insisted on my sharing his *coupé*, and we travelled three days and two nights together. His buoyant spirits, his varied conversation, his campaigning stories, made him a delightful companion. I seemed to have much more in common with him than with "Tom," his son. I parted from him in Paris with great regret, and a promise to visit him at Carron Hall, which came off next year. This visit will come in hereafter.

I rejoined at Woolwich on the 1st of August, and on the 15th was ordered on detachment to Chatham, where I remained three months.

At that time there was only a subaltern's detachment of Artillery where there are now one or two batteries. I was quartered in Brompton Barracks, and threw myself eagerly into the opportunities of instruction available. Colonel Pasley, Captain Sandham, and Lieutenant Frome, R.E., gave more than a welcome to the young gunner who wanted to improve himself. I went through much of the instruction given to the young Engineers, some of them my contemporaries; more especially I studied Practical Astronomy, which was destined soon to prove of unexpected value.

I did not find the society at the mess (at that time the R.A. and R.E. mess, though I was the only Artilleryman) very congenial, but I attached myself much to three young East Indian Engineers, one of whom afterwards rose to great distinction. These were Baird Smith, Turnbull and Goodwin. Not only was the education given at Addiscombe at this time much superior to that given at Woolwich, but the pay of the Engineers was so high that the keenest competitions existed to get posted to that branch, and these young men were superior to the average of the Royal Engineers. Their rooms were near mine, and we were much together.

Baird Smith, I was told (for I never saw the book), published a small volume of poems, mostly religious, in India, and dedicated it to me! We renewed acquaintance subsequently in Canada, where he was sent to study the canal system, and he addressed to me a long letter, evidently intended for publication, from before Delhi. It will be found in the *Times* of May 11th, 1858. I gave the original to Kaye, the historian of the Indian Mutiny (see also *Times* of May 29th, 1858).

I don't know what became of Goodwin, but I renewed acquaintance with Turnbull, then a Major-General, many years later.

Early in November Captain Back, R.N. (Sir George), brought the *Terror* into Chatham dockyard, on her return from his Polar voyage, and I had some pleasant intercourse with her officers, who frequently dined at mess, particularly with the second lieutenant, Owen Stanley, who introduced me to an instrument I was afterwards destined to make extensive use of, Fox's Dip-circle. He had been the first observer to employ it in the Arctic regions, or indeed on any distant voyage.

At this time I worked very hard. I made a rule for myself not to pass more than six hours in bed, and kept it with very fair strictness, noting every morning when I went to bed and when I got up, but my studies were ill-directed and unprofitable. Many an hour have I shivered at my stand-up desk over Newman's "Romanism and Popular Protestantism," a book which about that time was much talked of. It was published before he joined the Church of Rome, and its aim was to vindicate the Church of England against Rome on the one hand and Geneva on the other, but it was quite out of any rational tone of reading for a young officer. I read of course other subjects, but not much in mathematics or languages, in which I was sadly deficient.

The Chaplain at Brompton was a clergyman of the old school, and the military chapel was so arranged that all the ladies sat on one side and all the officers, facing them, on the opposite. Needless to say that great levity, to say the least, prevailed, but I always went there with my detachment in the morning, in the evening to some church in Chatham. There was then an Irvingite Chapel in which I think Irving himself frequently ministered, but I never went there. I was a frequent attendant at Rochester Cathedral.

On 12th September a new steamer, H.M.S. *Lapwing*, was launched, and I got leave to stay on board and be launched in her. A very peculiar sensation it was, gliding down the ways, then plunging into the waters, and rising buoyantly out of them.

I learnt many useful lessons in the conduct of business while at Chatham from Mr. Jones, the Ordnance Storekeeper, a brother of Sir John and Sir Harry Jones, distinguished Engineer officers. Under the old constitution of the Board of Ordnance, the Ordnance Storekeeper, with the Commanding R.E. and R.A., constituted in large garrisons what was called the "Board of Respective Officers," which had a great responsibility in regard to local expenditure, especially in connection with barracks. We met once a month, and our business included a sort of audit of the storekeeper's accounts. On one occasion he produced a bag which he said contained a thousand

sovereigus. I was about to pass it in easy confidence, but he pulled me up sharply, said I must never take a man's word in such a case, and insisted on my counting or weighing them. Not very long after a young Commissariat Treasury Clerk at St. Helena was actually detected trying to pass a bag of pence for gold, and of course ruined. This young man was brother of a baronet, but a weak, poor creature. He made himself ridiculous in many ways. One of these was putting on kid gloves to count the dirty rupees.

Moral. In all audits insist upon seeing the cash balance or a banker's book accounting for it.

I returned to Woolwich on November 16th, 1837.

Before taking leave of 1837 I must record a terrible event that occurred on 5th January. Gunner Murray, of Major Colebrook's Company, 2nd Battalion, was on guard, and according to his habit was indulging in most horrid and blasphemous language. The non-commissioned officer, Corporal Humphries, checked and reproved him, when he said, "If he mightn't be swearing now he would have his fill of it when he got off guard." Immediately he got off guard, however, he found himself unwell, went down to the hospital, and died in less than half an hour.

The year 1838 opened with what was long remembered as "Murphy's Frost." It lasted from 8th to 21st January. On the 19th the temperature fell below zero; the river was full of floating ice; but what made it famous was its prediction by the compiler of a cheap almanac, of the name of Murphy, who, however, could give no scientific or rational ground for his prediction. It was a lucky guess, but it made a small fortune for him.

January 23rd.—Dr. Gregory related a remarkable story. Dr. Hutton, in his "History of Mathematics," published in 1797, referred with some contempt to the pretended use of the divining rod to discover springs of water. He received soon after an anonymous letter, in which the writer offered to convince him that he was mistaken, and made a strong appeal to him not to be led away by vulgar incredulity, but to investigate the subject for himself. Dr. Hutton invited the writer to call upon him, and on a day appointed a carriage drove up to his door, out of which stepped two ladies. They proved to be Lady and Miss Milbanke, the latter of whom subsequently married Lord Byron. Lady Milbanke was the writer of the letters. She offered to give him proof upon the spot. Accordingly she was conducted to his garden on the field behind it on Woolwich Common, and after a little time, in which she was closely watched by Doctor, Mrs. and Miss Hutton, and Mrs. Bryam, the rod

turned over in her hands, and she announced that there was water ! It was perfectly true, for there was found an old well. Dr. Gregory was not present himself, but the broken rod was kept for some years in his cabinet by Dr. Hutton, and he was convinced that there was no collusion or deception.

Early in the year 1838 Henry Lefroy received a small legacy at the death of a relation, and he writes to his mother, January 28th :—

“I think it particularly fortunate that I should be becoming entitled to this money just at this moment, and I need not say how happy I shall be to accede to any arrangement by which you may be cleared of your difficulties and relieved of the uphill work of economising under the incubus of unpaid debts. Charles did show me the abstract of your accounts for the last five or six years, and I see what difficulties you must have had to contend against, but these I hope will for the future be much lightened. I shall cost you, I hope, nothing more.”

The legacy was only a small one, but it gave him some addition to his pay, and he was true to his word, and cost his mother nothing more.

My visit to Chatham bore fruit in February, 1838, in the realization of a project I and many better men had long cherished for securing for Artillery officers at Woolwich some similar opportunities of procuring professional instruction and carrying on study, as were enjoyed by Engineer officers at Chatham. Dr. Gregory put into my hands the whole of the MS. records of a regimental society of which Dr. Hutton had been Secretary, but of which I had never heard (it had died a natural death on the breaking out of the American War), and armed with this precedent I drew up a paper to which F. Eardley Wilmot joined his name, and having first obtained the adhesion of as many officers as we could (I don't think anybody else signed, lest we should be said to be “addressing our superiors in a body”), we took it to Colonel Cockburn, who we thought the most likely man to befriend us. Colonel Cockburn was, I think, at the time at the head of the Laboratory. He was a beautiful artist and a man of large and liberal sympathies, not a particularly distinguished scientific officer. He entered warmly into our aspirations, and promised to bring them to the favourable notice of Sir Alexander Dickson, who in his turn was equally indulgent, and warmly recommended the proposal to the Master-General, Sir Hussey Vivian, as one which deserved his encouragement. With surprising rapidity and absence of opposition from any quarter, the favour of successive high authorities was obtained, and the proposal became an established

fact. The official stages are all related in my preface to Vol. I. of the "Proceedings of the Royal Artillery Institution," where will also be found a pretty full account of the earlier regimental society. Colonel Cockburn was President of the first Committee, and I was Secretary.

I cannot forbear recording a little incident of our first general meeting which gave me great pleasure. The Committee had to draw up a report, and they inserted at the end a paragraph complimentary to the Secretary. Instead of the Chairman reading the report he handed it to me to read, and when I came to this paragraph I felt awkward, and after a moment's hesitation I closed the paper, bowed to Sir Hussey Vivian, who had come down from London to preside, and sat down. "I think, sir," said Sir Alexander Dickson, beaming at me benevolently through his spectacles, "that the Secretary has not read the whole of the report," and taking it from my hands he read the paragraph I had omitted. Of course Sir Hussey Vivian was gracious, and I got more notice than I should otherwise have done ; but the action was perfectly simple and spontaneous.

My summary for the month is :—

Made the Table of Foreign Ordnance.

Began, but did not finish, "Mitchell's Life of Wallenstein."

Began Tables of Mortar Practice.

Went on slowly with Mathematics and German.

I continued my habit of morning work. One night or morning some fellows who had been to some great ball in London, returning to barracks noticed the light in my room. "There is some fellow sitting up very late," said one of them. "Up late !" said Ratcliffe, one of the party. "Up early you mean ! It's that d—— fellow Lefroy sapping at his books by candlelight."

I frequently met interesting people at Dr. Gregory's—the Missionary Williams of Raratonga, killed not long after his return ; Alexander or "Sandy" Scott, a gifted but eccentric Presbyterian minister, much connected with Irving, and frequently mentioned in the letters of Thomas Erskine ;—he held at one time a sort of conventicle of his own at his cottage on Plumstead Common, not being satisfied with any church ; his expositions of Scripture were beautiful ;—also Asa Rassam, a Nestorian. Dr. Gregory himself was a mine of wisdom and of anecdote. He had at this time ceased all active interest in scientific pursuits. His turn of mind was theological. He appeared to be very well read in St. Augustine, while his intimacy with the eminent nonconformist Robert Hall, whose life he published, with James Montgomery, the sacred poet, and indeed

with almost all the orthodox nonconformist divines of his day, made his conversation always instructive. I suppose he was by conviction a Baptist, but he and his family were regular attendants at Mr. Molyneux's church. His letters on the Evidences of Christianity were of the utmost value to me, and I have ever regarded my intimacy with the family for about four years as one of the most precious advantages of my early life.

We had a very charming circle of young lady friends—Jessie Cockburn, the sweetest singer I ever heard ; Mary Lynn of the violet eyes, thoughtful, accomplished, gracious, now, I suppose, a white-haired old lady of eighty or nearly so ; “Fanny Anne,” bright, vivacious, with her kindly Scotch stepmother, Marie Skyring, long since dead, winning by her innocent simplicity. Augustus Frazer had been brought up from childhood with these, and I, as his friend, fell easily into habits of intimacy with them too. Official Woolwich was very clannish and unchanging, their parents were friends, the young people grew up as brothers and sisters, there was no flirtation. Not one of us young men was in a position to marry, or dreamed of such a thing except as a vision of the distant future ; but we were the happier and the better for our free intercourse, and I date many life-long friendships from those days.

Towards the end of my stay at Woolwich the house of Benjamin, first Lord Bloomfield, who had succeeded Sir Joseph Maclean as Commandant, was added to those I visited. This fine old courtier was always kind and dignified, and very hospitable. He lived in the Arsenal in the two corner houses. One evening he said to me, “I will give you young gentlemen four rules that old Lord St. Helens gave me when I was about your age. You will find them very useful.

1. Never speak evil of dignities.
2. Always answer a note.
3. Always take off your hat to a lady.
4. Have something pleasant to say of everybody.”

Lord St. Helens was a courtier of the early Georges, if not of Queen Anne ; the wisdom of the ancients speaks in these precepts. Of more modern mintage are two others :—

5. Ask for everything that's going.
6. Sit down when you can.

And they apply more to life at Court.

In November I got a few weeks' leave, and paid my promised visit to Carron Hall. I went to Liverpool by rail, to Glasgow by steamer, and to Falkirk by canal boat, which was then the easiest way. I met with the kindest reception. The family consisted of Major Dundas

(I think he was not Lieutenant-Colonel then), Mrs. Dundas, the two "little girls," aged respectively fourteen and thirteen, and Miss Beresford, a visitor. It was a household of innocent mirth and warm affection. Mrs. Dundas, then about forty-three, was a self-taught artist. She had already painted several pictures, which still adorn the drawing-room, although the best were copied in the Dresden gallery three years later. Absorbed in her art, and of naturally placid spirit, she was no match for the boisterous spirits of her husband, who was always making fun, slyly abetted by his children.

Major, or, as he was later, Lieutenant-Colonel, Dundas was an officer of much war service.

Born in February, 1792 ; Ensign 52nd Regiment 1808 ; landed in Portugal 19th August, 1808 ; battle of Vimiera 21st August, 1808 ; transferred to 2nd Battalion, advanced with Sir John Moore's army, and retreated with it ; battle of Corunna 16th January, 1808 ; promoted Lieutenant July, 1809 ; embarked for Walcheren ; transferred to Royal Dragoons 1810 ; battle of Fuentes d'Onor 4th May, 1810 ; promoted Captain 60th Rifles 1811 ; exchanged into 15th Hussars ; battle of Vittoria 21st June, 1813 ; battle of Orthès 28th February, 1814 ; battle of Toulouse 10th April, 1814.

My days were occupied with long walks, drives, and visits, our evenings with charming music, in which duets between the girls, their father often taking a part, bore the chief place. I never was in a more happy household. Neither of the brothers were at home. Tom was then commissioned and with his regiment, 79th Highlanders, in Dublin. Joseph was a big boy at the Edinburgh "Academy."

A visit which made a great impression was to Count Flahault, then residing at Tulliallan, the property of his wife. The remarkable beauty of his daughter, afterwards Marchioness of Lansdowne, dwelt long on my memory.

As for A. and C., the two "school girls," in my young-mannish eyes, they were delightful to play with. It was rather a surprise to me when I read in the papers the marriage of the elder in February, 1845, to Lieutenant-Colonel Armine Mountain, 26th Cameronians.

Little did I dream that in happy second marriage that same "little girl" was destined thereafter to be, for twenty-seven years at least, the joy, the pride, and the blessing of my life ; the closest friend, the dearest companion, in many conditions and many lands, that ever man was blessed with.

I left Carron Hall about the middle of December, 1838, and did not revisit it for more than twenty years.

Traits of character are often shown by trifling circumstances, and the following passage from a letter to his sister is characteristic of his activity and energy, and the readiness with which he seized any opportunity of usefulness.

“WOOLWICH,

“*March 18th, 1839.*

“We had a house burnt down here about a week ago. It was a pretty good blaze, and myself and another officer who had less objection to smoke and sparks than the rest, had the honour of being thanked by Lord Bloomfield for our valuable services, and mentioned to the Master-General by him. I was the first person on the roof of the adjoining house. I got there by lying on my back on the rafters of the garret ceiling, and kicking away till I knocked a hole through the tiling. It must have been amusing to the people below to see a foot and leg several times appear through the roof till the aperture was big enough for me to get through.”

CHAPTER III.

THE subjoined letter marks the turning point in my life. I was, if I remember right, quartered at the Tower when it reached me. I had met Major Sabine when he did duty for a short time at Woolwich, in 1837.¹

“April 10th, 1839.

“MY DEAR SIR,

“The enclosed report and its subjoined letter will make you acquainted with the particulars of the scheme of magnetic research which has been fully acceded to by Government.¹

“You will perceive it consists of two branches, a naval expedition and fixed observatories at certain stations on land. The naval branch is of course undertaken by the Admiralty, and the ships, or one at least, is this day commissioned. It is the intention of Lord Melbourne that the fixed observations should be carried into execution by the Ordnance Department, and Sir Hussey Vivian is to be acquainted with this intention to-day. The observatories are to be three in number, Canada, St. Helena, and the Cape of Good Hope ; others are to be established by the East India Company, and other nations are to be invited to co-operate. The duration of the observations is not to exceed three years, and it is proposed that each should be under the direction of an officer of Engineers or Artillery, with three N.C. officers of his choosing. I know not how such employment might be suitable to your wishes, but from conversation I have had with Sir Alex^r. Dickson, I think it most probable that he will look to you as the first person whose wishes he will ascertain. I therefore write this *private* note to give you a little more time than you might otherwise have for considering the subject, and to offer you any further explanation that you may desire in considering it. The Dublin observatory (Professor Lloyd’s) will be the model on which the fixed observatories will work. The officers who undertake their charge will have to be instructed there, and you may be quite sure that there will be no part of the duty of which you will not be able to make yourself fully the master.

“ (Signed) EDWARD SABINE.”

¹ Printed in my “Memoir of Sabine Proceedings of the R.A. Institution, 1884,” p. 381.

Of course I very eagerly accepted this offer, and after a few weeks of delay I was, together with G. B. Riddell and F. Eardley Wilmot, taken off garrison duty, and, what was more agreeable, we were put upon our staff pay of ten shillings a day.

On the 26th June Sabine gave a luncheon at the mess to the Council of the Royal Society and a number of scientific men, and Woolwich was excited by the presence of Herschel, Baily, and other eminent men. Sabine himself took lodgings in Woolwich in June and July, as he used afterwards to say, for the purpose of being near us and helping us; but if that were his object, and I see no reason to doubt it, he was singularly unpractical and unsuccessful. He made no arrangements, and I cannot remember to have been helped by him in the least degree.

We used, however, to attend meetings of the Royal Society at Somerset House, and also of the Committee of Physics; and one memorable day we were all entertained by Herschel at Slough. The occasion was marked by a very ludicrous incident. Herschel had slept in London, and was to meet us at Paddington, the Great Western being then open as far as Slough. Carrying his night things in rather an untidy bundle (no Gladstone bags in those days), he inquired of a policeman the shortest way to some street, where he intended to catch the omnibus to the station. Now, this eminent philosopher, then in the zenith of his fame and influence, was careless of appearance, and did not look like a newly-made baronet. Policeman X. looks at him with suspicion, and insists upon seeing the contents of his bundle, which he had reluctantly to show. Having satisfied him, he suddenly remembered that the omnibus must certainly have passed the spot where he had intended to catch it, and that he must run to intercept it at another point. So he started off in a new direction! He just caught it, and jumping in, found his friend and guest, Francis Baily, already there, to whom he was relating his adventure with much amusement, when up sprang the panting policeman on to the footboard, shouting, "Come out of that! I must take you to the station!" Baily, being a City man, and used to London, succeeded, with some difficulty, in satisfying the irate officer that he was under a mistake, and they were allowed to proceed on their way. But they lost the train, and got down quite late.

Some time before this Sabine invited Beaufort, Ross, Parry, and one or two more to a dinner at mess.

Sir John Herschel's house at Slough was full of objects of interest from the Cape. The great Forty-feet Reflecting Telescope, then the

most famous telescope in the world, or rather the tube of it, was still in the grounds, and his large scientific party spent a delightful afternoon. Forty-two years later I had the pleasure of being a fellow-passenger with his youngest daughter, the wife of Captain Maclear, R.N., to the Cape, and of recalling many incidents of that visit with her, although it was before her birth.

Not long after this, Wilmot, Riddell, and I proceeded to Dublin to get our promised instruction from Professor Humphrey Lloyd, D.D., and we were followed a few weeks later by the three Indian officers not then selected. Our stay was not long enough for thorough mastery of our work. In fact, the visit was premature, because the Professor had not himself matured his plans; but it was in all respects agreeable. Lloyd was one of the most delightful of men, and won all our confidence and affection. His genial spirit, his unbounded hospitality, his good nature and patience with our difficulties, the intellectual society of Fellows of Trinity we constantly met at his table—Petrie, Todd, McCullagh, Hamilton, full of Irish spirit and very free from “donnishness”—made this short sojourn in academic groves a bright experience. Some four or five years later, at whose instance I forget, we all united in presenting a little memorial of it to Lloyd in the shape of a silver inkstand with a suitable inscription. I was at the time in Canada, but my name was put down as a matter of course.

I embarked for St. Helena on board H.M.S. *Terror*, one of the Antarctic exploring vessels (Captain Crozier's), on 27th September, 1839, having been enabled to provide my outfit by a legacy of £228 11s. paid to my account in August. I think it was a share of the personal estate of my eldest brother George, which had waited for Maxwell's coming of age.

The voyage was quite unlike ordinary experiences at sea. Time was no object. We actually did not arrive till 31st January. The vessels were two old bomb-ships, made additionally heavy by six or seven feet of solid oak in the bows to meet Antarctic ice; and we called at every point of interest on the way. The first of these stoppages was at Madeira. The *Erebus* got there on the 20th October, the *Terror* on the 24th. Wilmot and I, having no duties (he was in the *Erebus*), went on shore. Beyond a general impression of the beauty of Funchal, and the extreme interest which attaches to a first introduction to semi-tropical trees and flowers, I do not recollect much of our stay, excepting the excursion in which we took part to the summit of the Pico Ruivo, to ascertain the exact altitude of this mountain—“this service was entrusted to Lieutenants

Wilmot and Lefroy, of the Royal Artillery"¹—and an incident was preliminary to it. Ross requested us to go on board and bring him his barometer, but he did not specify what barometer, or tell us where we should find it. We actually brought him his standard barometer, which we carefully took off the cabin wall! and he kept his temper, merely explaining that the barometer should on no account be moved. It was taken back, and two proper mountain barometers brought.

On the morning of the 25th October, long before sunrise, a large and joyous party of us started from Mr. Muir's house, conducted by "Señhor Diego" and young James Muir. I seem to see now, as we ascended, the glorious morning planet that preceded the dawn, and hung like a lamp over a bold promontory, and the sleeping sea below us. So brilliant was it that Wilmot and I got well laughed at, as we deserved to be, for stopping to see whether our actinometer would show any actual heat from it. Part of the road lay through a forest of fine timber, with an undergrowth of Hydrangeas in flower; then we descended to the sea-level at the village of St. Anna, which was embowered in tropical vegetation. From here the path ascended again, steep and rugged like a rocky staircase, until we reached our halting place for the night, a gentleman's *casa*, where we were hospitably entertained. We were in the saddle again as soon as it was possible (3.30 A.M.) to see the road, and passed the famous "Hornem-em-pic," the man on foot, a basaltic dyke bearing some resemblance to a gigantic human figure. The guides often impose upon inexperienced travellers, and persuade them that here they have reached the summit, but our Señhor Diego knew better. It was still at some distance, with another descent to make. We reached the summit at last (7.30 A.M.), very ready for breakfast; and while we were there the clouds lifted, and gave us a glorious panorama of the whole island. The barometric observations were especially entrusted to Wilmot and myself.

The descent from the summit was, of course, easy enough, but it was impossible not to admire the unflagging spirit and good humour of our muleteers and guides, who had really had little or no rest since we started, for the mules kept up a kicking and squealing all night, which kept us all awake, and the men seemed never to stop talking.

We left Madeira on the 31st October and at daylight on the 2nd November I was called on deck to see the Peak of Teneriffe.

¹ Sir James Ross's "Voyage of the *Erebus* and *Terror*," vol. i., p. 5.

Naturally I looked for it near the horizon, and I can never forget my admiration when it was pointed out to me above the morning haze, high and glorious in the pale blue sky. We were sixty miles distant.

We made a few hours' stay here, where, however, my feelings were deeply stirred by seeing in the cathedral some flags captured on Nelson's defeat in 1797—I suppose boat flags.

We called on the Governor's wife, who spoke nothing but Spanish, which nobody understood, and could merely flirt her fan and smile graciously to our single sentence "Mucho calor!" We also visited the famous and half-fabulous Dragon-tree of Orotava (see Piazza Smythe's "Teneriffe" for the curious story of its gradual growth in exaggeration, until, in books of the beginning of this century, it was classed as one of the wonders of the world).

Our next landing was at the Porto Praya in St. Iago, one of the Cape de Verde Islands, which we reached on November 14th. The harbour here presents the curious feature of a horizontal white line, running round at half the height of the black basaltic cliffs. It is, in fact, a calcareous bed of very recent date, geologically speaking, about three feet thick, and marks a long subsidence followed by the outpouring of a prodigious flood of lava, and then the slow elevation of the whole from the bed of the sea. It is full of recent fossils, and the upper surface has been converted into a crystalline marble by the heat and pressure of the lava.

The first time we landed we found a couple of dirty sailors crouched in the long grass outside the town. They turned out to be two of the crew of an American slaver then in harbour, who had swam ashore when they saw a man-of-war's pennant, but Ross did not molest her. Our first visit was to the great Boabab tree, *Adansonia digitata* (Monkey-bread tree), near the town. The trunk is thirty-eight feet round, but only about ten feet high, and the spread of the branches not great. It was covered with unripe fruit. Having since (in 1881) carefully measured a stringy-bark tree (*E. obliqua*) in Tasmania that was sixty feet round, I have lost my respect for the Boabab, although as a very characteristic African tree much connected with negro fetish worship, it is worth a visit.

We were six days at Porto Praya, which gave time for several excursions. One of these was of a large party to St. Domingo, the ancient capital, where there is a large but very ugly cathedral. The old service books, with their musical notations in square notes, were interesting. Another was by Hooker, Wilmot, and myself only,

to a fertile valley in the interior, where Hooker had an introduction. We were hospitably entertained, and spent a pleasant afternoon botanizing. We lost our way in returning, and wandered for a long time sustained only by one large Mammeë Apple (*Sapota mammosa*), which our host had given to Hooker.

We left Porto Praya on the 20th November. I was destined to see the Cape Verdes once more, but this time it was at St. Vincent's in 1881 for coaling. It is a far more barren and burning spot than St. Iago.

This is a good place to record something of our life on board ship. Captain Crozier, who perished afterwards so miserably in the Arctic regions, was one of the most amiable and genial of Irishmen, a first-rate seaman, but not a scientific man. Ross united in his own person almost all the scientific qualifications of the expedition, except Botany, represented worthily by Hooker, and Natural History, rather weakly represented by the three other medical officers. The lieutenants were not selected for their special attainments. Man-of-war etiquette and discipline were of course strictly maintained.

Our party in the gun-room consisted of the First Lieutenant Archibald McMurdo, a brother Sir Montague McMurdo, an energetic, fine fellow, who died on his way homé of lockjaw, the effect of an apparently trivial accident at St. Helena, by which his knee was lacerated.

Lieutenant C. G. Phillips, who was an older man than McMurdo, and who was in his boyhood perhaps while Tom Cringle was writing his log. He was taken, with a boat's crew, by pirates on the West Indies, and kept a prisoner some time. He never related his experiences. He had an embittered, sarcastic spirit, the fruit of disappointment, but was otherwise a quiet and pleasant mess-mate.

Then came Lieutenant Kay, who was the life of the party, full of animal spirits, a capital performer on the flute, always good humoured. He was a nephew of Sir John Franklin, and was to have charge of the observatory which Ross was to establish at Van Diemen's Land. We looked upon him as predestined to marry his cousin, Miss —, but he did not. She became Mrs. J—, and he married somebody else. I met a daughter of his at Adelaide in 1881.

Then we had a capital fellow in the surgeon, John Robertson, a Highlander, big, simple, good-humoured; and a quiet, gentleman-like acting purser, G. H. Mowbray, whom I met some years later at Antwerp in the royal yacht. Lastly, there was the acting master, a common fellow, of a bad sort.

We always laid in a good supply of poultry, turkeys, bananas, and oranges at the ports. I remember getting eighty splendid oranges at St. Iago in exchange for an old hat, but these supplies sometimes gave out before we got to the next place, and then we were reduced to ship's provisions. We all in turn dined with Crozier, and he on Sundays dined with us, making himself happy and agreeable.

In our very slow progress, sometimes becalmed, sometimes beating against a contrary wind, they would occasionally "pipe all hands to skylark." On one of these occasions I had for the first time made my way to the maintop, when I heard McMurdo shout from the deck, "Tie him up, lads! tie him up!" and immediately half-a-dozen active young fellows were running up the ratlines on both sides. I let them approach, and then swung myself on to the mizzen-stay, and descended it easily, hand over hand, to the deck, without being caught. There was rather a hush for a moment, but I was light and active, and accustomed to gymnastics. After that they did not try to tie me up.

After leaving the Cape Verde we steered for St. Paul's Rocks, a curious group of rocky summits, rising out of deep water 56° N. of the line. They might all be comprised in a square of 200 yards. They are not directly volcanic, but rest on a volcanic base, and are remotely igneous, principally hornstone, the highest summit 70 feet. They were swarming with birds so unaccustomed to man that we caught them with our hands. The doctor called them *Pelicanus sala* and *Sterna stolidus*.

Here Wilmot got washed off his feet by the surf, and was in risk of being drowned, the boats having been sent away. He got his feet much hurt in ultimately struggling ashore, by treading on echini. Ross mentions the incident without naming him.

We crossed the Line three days after this in Long. 30° W., and were boarded by Father Neptune in the old fashion. I was one of those introduced to him. The play was pretty rough, though I had nothing worse to complain of than a sousing in an immense bath made with sails on the deck, after having been shaved (in make-believe) with a wooden razor. I was careful not to reply to his questions. Some unpopular youngsters did not get off so cheaply.

We then had a fortnight without incident, much impeded by calms, until on the 17th December we sighted the Island of Trinidad, and landed there. This small island, which was then, and is probably still, uninhabited, lies off the coast of Brazil, in Lat. $21^{\circ} 30'$ S. It is entirely volcanic, and the interior is almost

inaccessible. We had much difficulty in finding a place to land at, and were then entirely confined to a narrow strip between the shore and a girdle of precipitous cliffs 2,000 feet high, which runs round it. We landed close under a magnificent column of basaltic rock, which rises to a height of several hundred feet, at the end of a natural spur or buttress to the cliffs. I climbed with much difficulty about half-way up it, and was glad to get down again; but I found a fern precious in Hooker's eyes. I think it was *Hæmonites palmatæ*, or like it. The place was so volcanic that the magnetical observations were good for nothing. We left the same evening. On our long stretch across the South Atlantic to St. Helena, which was the most tedious part of the voyage, we did not make on our course, which was nearly in the teeth of the Southern Trade-wind, above twenty-three or twenty-four knots in as many hours.

Christmas Day was of course passed on board. We were very happy, and had abundance of good cheer. I remember the conversation turning on where each man had been the previous Christmas Day, and being amazed at the many and distant quarters from which the party round the table had been gathered.

Our long voyage of 126 days terminated at St. Helena on the 31st of January—by far the longest of twenty voyages it has been my fortune to make. I well remember the interest, not to say emotion, with which I gazed at those historic precipices behind which my home was to be for three years. The Governor-General, Middlemore, very kindly gave me quarters for a few days, but it was soon decided that the observatory should be erected on the grounds of Longwood House, which was given up to me as a quarter, and I moved into it.

The *Erebus* and *Terror* proceeded on their voyage, carrying Wilmot on to the Cape. Four years later, when in the north-west of America, I was reminded of them by receiving a polite request to pay for some bedding supplied to my men, which, as the purser would not take it back, they appropriated and took on shore with them. It amounted to some pounds, but I remonstrated, and got off.

The garrison of St. Helena consisted of a few Engineers, a company of Artillery (not then called a battery), and two companies of the 91st Regiment under Captain Blackwell. They were all four or five miles from Longwood, where I lived very much to myself, until my friend the Rev. R. Kempthorne, the Chaplain, still living, I believe, brought his newly-married wife to share with me that large house. The Artillery was commanded by Colonel —, a rather well-known officer, who from the first was hostile to me, because, knowing the man, Sir Alexander Dickson took pains to make me entirely independent

of him. He afterwards returned as Governor, when we became more friendly. He drew a tremendous long bow, at which Ross was not bad; and to hear the two men cap each other's stories during the short stay of the latter gave great amusement. Captain Blackwell was an old man for his rank with a pretty young wife. Lieutenant Barney, who commanded the second company, was, for a subaltern, even older. He also had a very charming wife much younger than himself. The two ladies were not altogether on cordial terms, and each had her admirers. I became intimate with the latter, who was clever and "spirituelle," with much French manner, having, in fact, been brought up in France, and was very intimate with my friends the Bennetts.

These Bennetts were the mother and sisters of my old school-fellow George Bennett, who was himself holding a commissariat clerkship. He was then, as he has remained, a high-principled, modest, steady fellow, an excellent man of business, and a cheerful, agreeable companion, very well versed in horticulture; in fact, the income of the mother was chiefly derived from a large productive garden. I have occasionally corresponded with him and one of his sisters, Lady Ross, ever since.

Once a month, always on the Saturday nearest Full Moon, I dined with the Chief Justice (Weld). The day was determined by the dangers of the road, which ran along perfectly open and unfenced precipices. The scenery of the island had a never-failing charm for me—whether the lofty central ridges, covered with luxuriant vegetation and beautiful Tree Ferns (*Dicksonia arborescens*), or the rugged lower grounds seamed with great dykes, and of every colour which volcanic ashes and tufa and lavas decomposed to clays, can assume—purples, yellows, reds, and browns without end. At that time there still survived all the plants peculiar to St. Helena, except the Ebony (*Melhania Melan oxyglon*), and of that indeed there was one plant in a garden. Now I am told they are mostly extinct. What has happened to kill them I know not. I planted a good number of the Stringwood myself. I am told there is now not one to be found. (*M. erythopyglon*).

A favourite resort of mine was the beach below, "Hold-fast-Tom," a place hardly known but to the black fishermen. It required a rope here to descend the cliffs, and there was one permanently fixed. But perhaps my most happy hunting ground, when I could get a companion, and be some hours away from the observatory, was Gregory's Valley, which was nearer Longwood, but 1,700 or 1,800 feet below it. This is a great circular basin open to the sea on the east, bounded on the north by the huge mass of the Barn, the terminal precipices of which are 2,000 feet high, and on the remainder of its circumference

rising by steep, often precipitous, rugged slopes to the level of Deadwood and Longwood Plains; a labyrinth of ravines occupies the central area, almost destitute of vegetation, but wild and intricate to the last degree. Here were innumerable veins of carbonate and sulphates of lime, often in the form of arragonite and satin spar, and a good deal of inferior chalcedony and jasper. The whole area is ploughed and rent by eruption dykes, which intersect one another. There was a shaft in one place, which had been sunk in search of jasper; it was of no great depth, perhaps thirty feet, and I got myself lowered to the bottom, where, however, I found nothing, but had the curious experience of hearing the waves beat on the shore like the voices of invisible beings murmuring at my ear. The sea was a quarter of a mile distant. The only mineral discovery that I made was a bed of massive hæmatite iron with mammilated surfaces. This was in Turk's Cap, but it was of no commercial value.

I say nothing of my troubles and difficulties in starting the magnetic observatory. We all encountered them, and got over them with more or less loss of time and patience. Great stress was laid upon our being ready to co-operate with Ross, who expected to keep the magnetic term-day of 29-30th May at Kerguelen's Island. He did, in fact, arrive there on the 13th May, and remained at Christmas Harbour until 31st July; but neither Wilmot nor I were in a position to do all we wished. Neither observatory was ready for occupation, but we made the best temporary arrangements that we could, and had corresponding observations of declination and horizontal force to produce, though nothing came of it beyond establishing a fact, since abundantly confirmed, that the larger magnetic disturbances prevail at the same time in both Hemispheres. I did not actually get to work in the new observatory before August.

At that time all homeward-bound vessels touched at St. Helena, and I had many interesting visitors, one of the earliest of whom was Captain Grey, 83rd Regiment, afterwards and still living as Sir George Grey of New Zealand. He was returning with his pretty newly-married wife. He told me much about South Australia, and of the unconstitutional doings of the Governor Gawler. A few months later the Colonial Office superseded Gawler, and sent out Grey as Governor in his place. The former in turn paid me a visit on his way home, and I had the other side of the story. Gawler had exceeded his powers in drawing bills on the Treasury, but there was no imputation of improper use of the money, and I thought him an ill-used man.

The unfortunate Mrs. Noble was another visitor. She had been

carried about by the Chinese in a wooden cage after her husband's murder—a plain middle-aged woman.

The greatest event of 1840 was the arrival of the French frigate, *La Belle Poule*, on the 8th October (Captain Hernoux), bringing the Prince de Joinville, youngest son of Louis Phillippe, Marshal Bertrand, General Gourgaud (two of the companions in exile of Napoleon), M——, his valet, and the Count Chabot, afterwards well known as Count Jarnac, who was the Commissioner (French) appointed to superintend the solemn removal of the remains of Napoleon to France. On our side, Captain Alexander, R.E., was appointed Commissioner. The Governor, who was an old Peninsula soldier, hated the whole affair, shut himself up, and left the management and reception to Colonel Hamelin Trelawney, R.A.

The Prince was a fine young man, about six feet three inches in height, but slightly built. He declined society, and went about in his loose white trousers, old coat, and tarpaulin hat, much as he pleased. About thirty years later I was presented to him at Shoe-buryness, and on reminding him that it was not the first time, I found him very gracious. He and I alone remain of those who witnessed this disinterment.¹

It was Louis Phillippe's policy to put as much ceremony as possible into the solemn restoration of Napoleon's remains. Many days were wasted over negotiations—discussions as to what honours should be paid, how many guns should be fired, and the like. Our Government had directed the Governor not to recognize him as an emperor if he could help it! The Governor was not going to be bothered with a diplomatic question, and the French speedily found out that they had only to put on pressure to carry that point, which determined the land salute as 103 guns. But the sturdy little captain of H.M.S. *Dolphin*, Littlehales, declared that he was "General Bonaparte" in his instructions, and as general only would he acknowledge him; he should only fire 21 guns. Here was a delightful field for the diplomats, but Count Chabot's gammon was all in vain. Littlehales stuck to his point, and the Prince refused to return his visit or go on board his ship.

Since these pages were written, a long-lost letter of Lieutenant Lefroy to one of his sisters, giving an account of the opening of Napoleon's tomb, was found, and it is inserted instead of the recollections which were written in 1887. The accuracy of the latter is remarkable, but the letter written at the time is fuller, and will probably be more interesting to the reader.

¹ George Bennett, now resident at Cape Town, reminds me that he also was present on this occasion.

“LONGWOOD, ST. HELENA,

“*October 17th, 1840.*

“You will not give sixpence for an account of the removal of Boney’s remains that is not written at the time, so I mean to give you a plain matter-of-fact description, to repress my Pegasus, and not to be either poetical or sentimental.

“I had the good fortune, by special favour, to witness the whole. The ceremony, however, was so far private, that none were allowed to be present but those officially appointed. It was agreed that the exhumation should commence at midnight on the 5th, twenty-five years to a day since he landed on the island. The parties present were the Count Chabot (Chief Commissioner), Marshal Bertrand, General Gourgaud, Las Cases, Marchand, Archambeau, and another old attendant of the Emperor’s, two or three French captains, L’Abbé Coqueran, and four or five of the English colonial authorities, the judge, &c.

“It is in a wild spot that he lay, and the midnight assembly formed as picturesque a scene as I have ever witnessed. The sentries posted on the hills, the black labourers, the soldiers of the guard and working party, mixed up with the muffled figures of the authorities attending, in the imperfect light of the lanterns by which they worked, would have formed a scene for Rembrandt.

“I arrived after twelve, when the work was commenced. The iron railing was down on three sides of the tomb, the ground strewn with tools and tackling, and they were then loosening the slabs of free-stone that sealed the vault. One by one, by main force, with levers and rollers, they were heaved off, and we saw the walled space, filled in with clay and stones, at the bottom of which he lay. The night was wet and dark ; it helped the picturesque, but added nothing to the comfort or facility of the work ; but the workmen plied their task so well that in three hours and a half, seven feet of tamping were removed, and the solid masonry was reached.

“The first layer of masonry, besides being set in most tenacious cement, and of the hardest stone, was clamped and leaded together, as if those who had laid him there had meant to defy disturbance. Nearly five hours were consumed in removing the thickness of one foot of the covering. The lower part, to render it perfectly watertight, was all Roman cement, as hard as stone. However, early in the morning they found out, much to everybody’s delight, that they had got down to the actual slab of the sarcophagus, and had not much more to do.

“Interesting as the occasion was, one does not stand out in the wet

and cold, from midnight to sunrise, without some little impatience. Bertrand disappeared early, and many more from time to time were longer getting their coffee than was exactly necessary. Some sort of accommodation of sofas and chairs had been provided in the house hard by. I got a doze for half an hour in the nest of the officer on guard. It was necessary to let in the bolts and rings into the upper stone of the vault; this took some time, but by twenty minutes to ten everything was ready. Imagine our eager looks as one heave at the tackling lifted the massive slab, and lo! before us were the relics of the "mighty dead," in their still repose.

"As an official formality, it was requisite to measure the vault, the coffin, &c., to identify them. This sort of thing had been done by Count Chabot at every step. The Abbé then took his post at the head of the grave, and we listened, bareheaded, to the "De Profundis," and other prayers which he pronounced. His own splendid robes (the crucifix and holy-water vessel were new to me), and the Latin service, with the low response of two pale choristers who stood on either side, made a very impressive part of the ceremonial. This service was short, but he then went aside and pronounced a long one all to himself.

"The doctor had tools for making a hole through the coffins (tin, mahogany, lead), to inject creosote, but they decided on opening it entirely. There had been many absurd rumours circulated, such as that the body had been changed. They wished to set all these to rest. However, one of the officials entered a protest against the opening, and would not be present, and it is a question whether there was proper authority for so doing. No one was allowed to be present but the Commissioners and others ordered to attend. The body was found perfectly preserved, as if buried yesterday—the features distinguishable, the dress unimpaired. Some were affected even to tears at seeing so wonderfully revived, as it were from the dust, the master they had loved and served. I heard Marchand say that he was almost more like himself than when interred. The slight swelling had restored something of roundness to the features; the beautiful hand, for which he was remarkable, was calmly extended beside him; the vase, the coins, the decorations, all in their former place. The body was, I believe, not embalmed, so that this is due to the manner in which everything had been hermetically sealed; corruption and the worm had spared him who had given them so many a banquet. It seems as if half the horrors of death were gone, when even to the body it may thus become a long unbroken sleep.

“You have read the account of the ebony coffin they have brought with them ; his own coffins were all deposited inside it, and the whole again in another sort of sarcophagus of oak, making an immense weight (twenty-three cwts.) for the hearse which was to take it to the ship.

“The procession did not start from the tomb before four in the afternoon. It was a small one, for there are few troops here, and the weather was vile—a wet cloud over the whole time.

“The island militia regiment marched first, then the regulars, then the priest with his assistants bearing the crucifix preceding the hearse. It is almost worth while going to Paris to see the splendid pall. I have never seen anything so rich and beautiful. It is of immense size, I daresay fourteen by ten feet, of purple velvet richly embroidered (with golden bees), divided into four by a very broad cross of silver lace edged with gold. The embroidery of the border alone cost £1,000, beautiful scroll work, with magnificent wreaths at the angles, and outside of all a broad border of ermine.

“The angles were held by Bertrand, Gourgaud, and Marchand. The Governor and an immense number of officers, French and English, followed. I saw the procession pass me twice, but preferred not joining it, which I was not obliged to do, and I did not follow it to Jamestown to see the embarkation. I was told, however, that this was a pretty sight. I fancied that as it was late and wet it might be deferred until next day, and I was tired enough with my night's watching to be glad to get home.

“Minute guns were fired all the way, and a royal salute from the battery, but not from the English man-of-war. However, with this latter exception, everything was done as if he were emperor, a thing we never acknowledged before, which makes the *amenité* to France, and directly inculpates all preceding governments. I would have stuck to the ‘General Bonaparte’ as long as there was a ‘shot in the locker.’

“The Prince de Joinville met the procession at the wharf, and himself steered the boat that took off the body. He did not go about much, partly because the Governor was not able to entertain him, and there was nobody else to do so. He came one day to Longwood with a number more, including Bertrand. It was rather interesting to see Bertrand again on the spot with which his name is so much connected. I asked might I have the honour of showing H.R.H. round the house ? ‘Thank you, sare, I never drink wine,’ was his reply, in a very mild voice. He is extremely tall and thin, of a serious but very intelligent countenance, clever, gentlemanly,

and very agreeable when he pleases; draws well, especially caricatures, plays the piano, speaks and reads English and Spanish, and is, in fact, a very superior person. He had not time to visit the observatory, and stayed but a few minutes.

"Marchand and Bertrand came again, but I was out. However, I met them all two or three times, and saw a good deal of them, the Prince excepted. Bertrand and Las Cases, who paid me a long visit, asked me for a selection of island minerals, so I made one for each. All the French were eager to get them. One of my neighbours came to beg some one day. 'Bless me, sir, they is a-craving of them everywhere.' I gave away dozens. Nothing amused me so much as their anxiety to obtain relics of any sort or kind. Handfuls of earth, water from Napoleon's spring, leaves, flowers, bulbs—nothing came amiss to them. One merchant employed a stonemason to go over the hills and bring some of all he could lay his hands on.

"I don't know whether I have ever mentioned that I have formed a collection of more than 200 specimens (of minerals) belonging to the island, which is very profitable to me. I make exchanges. I got from the French doctor some from the plains of Troy, and I shall have no doubt by-and-by some of real value and interest.

"I must tell you one amusing thing. An English merchant vessel came round the point while the French were firing salutes all at once. She thought they were attacking the island, put about, crowded all sail, and fled for her life."

If I remember right *La Belle Poule* put to sea the same evening, the body lying in a kind of *chambre ardente* on the main deck. At that moment the relations of England and France were strained to the utmost degree. The audacious and aggressive policy of Lord Palmerston, coupled with the indolence and weakness of Lord Melbourne, had brought matters to such a pass, chiefly over the Syrian question, that a declaration of war was daily expected,¹ and the moment the ship got beyond the three-mile radius she cleared for action. Bulkheads were knocked down, cabin furniture of a costly kind thrown into the sea.

Littlehales, in H.M.S. *Dolphin*, followed her at a safe distance, determined if he got a chance to pitch a shell or two into "old Boney's coffin." Being much the best sailor, he might have done it with impunity.

The French behaved handsomely. Alexander was presented, *de camarade en camarade* by the Prince with a gold and diamond snuff-box,

¹ See Greville's "Memoirs," 2nd Series, vol. i., pp. 297—348.

with, it was said, £400, and Trelawney with a *Fusil de luxe*, a small double-barrelled fowling piece mounted in gold, the stock of rhinoceros horn, a beautiful work of art. They placed also at their disposal a large number of commemorative medals in silver and bronze, which were given away in an outrageous manner by private favour. My friend, the chief justice, refused to receive one on those terms. I was not offered one, and did not choose to ask, but many years afterwards I bought one from a lady to whom in her youth it was given. I also bought at the mint in Paris a very fine large medal representing the dying Napoleon.

Writing to one of his sisters on the 22nd October of this year, he says:—

“Just at present we are recovering from the French visitation, a thing longed for, but rather wearisome while it lasted. How old Bertrand ever became the friend and confidant of Napoleon I am at a loss to imagine. He is a good-natured, fat, unintellectual old fellow, whom you would take to be a better judge of cooking than of state policy. What he may have been twenty years ago I don't know. He was hardly himself either, while here, under great excitement, showing a degree of feeling very creditable. He evinced his delight at meeting his old acquaintances by kissing a good many of the ladies (hands only of the elderly ones). The other, General Gourgaud, is a much younger man, is really fifty-eight, but well preserved, and looks ten years younger. He perpetuated his memory by giving away some copper medals bearing his own image and superscription. Las Cases is a young man about thirty-five, mild and quiet in demeanour and appearance, given to scientific pursuits, an excellent musician, and I should think a man of good sense and sterling value. He, I expect, will be the historian of the event. He paid me a visit, and interested me by pointing out places and scenes connected with Napoleon's residence which tradition has not mentioned. Much to my surprise and satisfaction they by no means generally visited Longwood; at least, I saw little of them—I mean the officers of the ships—which saved me some bottles of wine and a good deal of time. The sailors used to be marched out in parties of forty or fifty under charge of an officer, but they behaved remarkably well.

“The Commissioner, Count Chabot, was the best among them, one of the most pleasing, gentlemanly, and thoroughly aristocratic-looking men that I have ever seen. He is young (twenty-six), with light coloured hair, the pure classic features of the highest blood, and the self-possessed finished manner of the highest society. I was

struck with him. His mother, they told me, is a daughter of the Duke of Leinster.

"The eagerness of the French to obtain relics was quite amusing. They nearly exhausted the spring (Napoleon's) by carrying off bottles of water; even handfuls of earth were acceptable. I made many happy with specimens of minerals. Bertrand asked me, so I made him a collection of sixty or seventy specimens, the same for Las Cases.

"When the Prince de Joinville was travelling in the States, on board a steamer, two Americans came up, 'Prince (or Mr. Prince), let me introduce my friend Mr. Jenkins,' then the other, 'Let me introduce my friend Mr. Tomkins.' The Prince told this himself to Mr. Wyld."

We return to the autobiography.

As I look over my old letters they bring back to my memory many incidents which at the time interested me. A young officer of the 91st had fallen violently in love with a very pretty girl, E——. His colonel packed him off at the shortest notice to the Cape. After a year or more there he asked leave to go home to England, and with difficulty got it, giving a distinct pledge that if the ship touched at St. Helena he would not land. The captain also had strict injunctions not to permit him to do so. Miss —— heard of his arrival, and went on board. At her tearful entreaties the captain allowed him just to go on shore to see her mamma, to come off in a couple of hours. He went. In two hours came, not the lover, but his peremptory order to land his baggage, and in a few days he married her. I never heard the sequel.

In March, 1841, I had a visit from Captain Dumont d'Urville, and the officers of the French exploring ships *Astrolabe* and *Zélée*. They made much of a six days' entanglement in the Antarctic ice, and it was evident that Frenchmen are not fitted to be Polar navigators. Their observations led them to place the southern magnetic pole in Lat. 72° S., Long. 134° E., which was not very far out. Sabine made it $73\frac{1}{2}^{\circ}$ S., $147\frac{1}{2}^{\circ}$ E. (Wilkes in 1840 made it 70° S., 140° E.) They received no extra pay. The observations were made by a civilian astronomer, M. Dumoulin. Dumont d'Urville was burnt to death in a railway accident not long afterwards.

A little later in the summer H.M.S. *Melville*, Captain Dundas, touched. The officers had an amusing story of the mandarin in command of one of the Canton forts sending him a friendly message before an attack, "If you no put plum in, we no put plum in."

The Governor's family were pleasant people. I liked going to the house because the usages and refinements of good society were maintained. The Governor was a very agreeable man. Perhaps once in six weeks I went over to dine, on a general invitation.

I may mention that General Middlemore had been A.D.C. to Sir David Baird, and was present when he had to undergo the frightful operation of having his arm taken out at the socket. Even the experienced surgeon was nervous. "What are you afraid of?" said Baird. "Cut away, sir, cut away!"

St. Helena was at this time the theatre of one of those experiments in which benevolent intentions, being carried out by ignorant or indifferent or coldly official hands, produce worse miseries than those they are intended to remedy. A Court of Admiralty was established in 1840 for the condemnation of slavers. One was brought in in September, 1840, which I went on board. It was empty at the time. I could not nearly sit upright on the slave deck. The same cruiser had already sent in three previous prizes, but in this case the captain took it very lightly; he had made fourteen successful voyages! The Chief Justice had great doubts as to the legality of the Court, but it worked with great promptitude. It only took two or three days to condemn a vessel—but legal or illegal was no concern of the captors. The Africans thus brought to the island were apprenticed upon easy terms to any one who would have them; but comparatively few could be disposed of in this way, the rest were simply prisoners in the most barren, arid, hideous valley on the island, without a tree, and hardly a blade of grass, where they died like flies, at the rate of 20 per cent. in a year. If they got sickness of any kind they never rallied, but lay down and died. They were not wanting in manly qualities. A boat race was got up in October, and a dug-out canoe manned by four of them beat everything. The children taken into service made very intelligent and tolerably industrious servants, and soon became much attached to their mistresses. I became interested in an old man, apprenticed to the Bennetts, for his melancholy look. He had a way of producing a kind of plaintive music by beating with a short stick upon a string tightly stretched on a bow. This he held to his neck like a fiddle, and accompanied it by a low inarticulate sound—perhaps it was a song. It was quite pleasing.

The following extracts from letters show what his life was at this time—busily engaged in his work, and his mind and thoughts turning to the more serious subjects which had at all times an engrossing interest for him. That his work was done well and thoroughly has been abundantly shown by the recognition of it at that time, and by reference to its extreme value by scientific

men of later magnetic research expeditions, some letters from officers of the United States expedition, written to him from St. Helena in 1890, with reference to his valuable work, not reaching England till after his death.

“ LONGWOOD, ST. HELENA,
“ *March 30th*, 1840.

“ MY DEAR MOTHER,—

“ I returned from Jamestown yesterday with the disagreeable sensation of being *alone* more strongly than I have yet felt it. With every one else in the island I had been looking forward to the arrival of the vessel expected from England, never doubting but she would bring me letters, and I suppose I am nearly the only person in the island to whom she brought none. . . .

“ I am getting into my place here a little more, but am so incessantly occupied that I have been very little about. I had visits on the part of most of the families, and have returned them, but with the exception of dining occasionally at the Governor's, I have not been out anywhere. I don't think parties are ever given here. Almost every one dines at three or four ; and as I have no horse, I have an excuse for staying at home. A horse is a necessary of life ; I am looking out for one, but like everything else they are dear. . . .

“ You will like to know my manner of life. Breakfast at eight, dinner at two. I take a watch regularly day and night for the observations, so that I only have every third night fairly in bed. For example, I may have to observe at either of these hours, from 10—11—12 ; 1—2—3 ; 4—5—6. The latter implies getting up about half-past three, the second takes a considerable slice out of the night, the first lets me get to bed by half-past twelve, and leaves me alone till morning. If the mosquitoes allow me to sleep I do very well. However, as I came here to work, I do not mind these irregularities, which are not so bad as a sailor has every night of his life. I seldom go out till sunset, and then take a stroll on Deadwood Plain, or go and eat peaches in my neighbour's garden. I have the reputation of being a great walker, partly from walking to Jamestown, but chiefly because I actually walk to church on Sunday—a distance of three and a half miles. I have established a good rule, to which I was pleased to find my men at once agree—that of having them all, men, women, and children, in to prayers in the morning and reading one of the Lessons of the day. As this is not a strictly military proceeding, I left it entirely to their own choice, but they all (all means four besides my servant, who has no choice) came readily.”

“TO LIEUTENANT EARDLEY WILMOT,
“CAPE TOWN.

“LONGWOOD,
“*January*, 1840.

“MY DEAR WILMOT,—

. . . “I am almost afraid to go into the subject of High Church doctrines ; they are so often misrepresented, and so much evil is done by men advancing their own impressions and opinions as those of their teachers. In talking over the subject with you, I am sure, however, you will believe that I am far from pretending to much acquaintance with the subject, or to a right to intrude my opinion on any one else. The subject has been a good deal before my mind, not so much with reference to what are called the Oxford doctrines, as that I feel more and more the palpable absurdity and inconsistency of professing church membership and neglecting so entirely those points on which there is no dispute, on which the Rubric is plain, which in many cases are so elementary that they are not stated so much as presupposed. My brother also (a clergyman) is very decided in his views, and frequently sends me books, so that I cannot help having an opinion ; though while the matter is thus disputed, I really recommend most men to do what they know to be their duty, and trouble themselves as little as possible about the Fathers. With respect to the Articles, it is I think confessed that they were purposely drawn up in such wide and general terms as to give the greatest latitude for difference of private opinion, so that for explicit statements of what were the doctrines of the Reformers we must look further, for which the charity of the Church leaves the widest field for conscience. It is on the idea that no more will be required, but if such is not sufficient and men will separate, then she has other organs by which she states definitively what are the truths she holds. The Canons, with their threats of excommunication, show, I think, how high is the authority claimed over those who may differ in opinion, but must not refuse to obey. I do not think it is asserted that a state of schism is necessarily one of exclusion from the means of grace or the road to salvation, but simply that it is a state of sin which even may be all chargeable upon the Church itself ; but as sin must be punished somewhere, and upon some one, and becomes individual when persisted in against light and reason, it follows necessarily, if we admit the doctrine of Apostolic Succession, which seems so clearly deducible from St. Paul’s Epistles to Timothy and Titus, that dissenting bodies, who do not pretend to it, are cut off from our Communion, not by ourselves, but *ipso facto* ; and to refuse

to admit them to equal terms is so natural, that the greater wonder is that any should call themselves churchmen and deem so little of the privilege implied in the title, as to think otherwise. . . .

“That the Oxford doctrines lead to startling consequences, placing us on grounds, both as regards Romanists and Dissenters, very different from what we once held, proves, I think, no more than our previous ignorance ; and, after all, we need never be afraid that all their consequences will be forced upon us, our judgment and conscience are left free. Do but admit that as born and baptized members of the Anglo-Catholic Church we owe her our obedience, that her principles must be ours, and we must always believe her right until she is proved wrong, and we have abundant room still left us for opinion. . . .

“I will say no more. May God guide us aright, that to whatever party we belong here, our names may have place in the Lamb’s Book of Life. The time may come when we shall see these matters in another light. ‘He is a rare and precious Christian,’ says old Baxter, ‘who is skilful in improving well-known truths’; therefore let me advise you, who aspire after a holy life, not to spend too much of your thoughts, your time, your zeal or your spirit upon disputes that less concern your soul, but when others are feeding on husks and shells do you feed on the joys above. . . .

“Yours affectionately,

“J. H. LEFROY.”

This anecdote, related to him in March, 1840, may interest some readers, and having been written down at the time, is no doubt correctly recorded.

“During the war the Directors of the East India Company had intelligence on one occasion that the French fleet, that of Villeneuve, had left Brest, it was suspected, for the East. They sent out orders to their Governor at St. Helena to detain all their ships until further orders. These despatches were taken by the *Espoir*, a fast vessel that made a remarkably short passage. Only a few days after she sailed it was known that the French had gone to the West Indies, and they applied again to the Admiralty to send out another vessel to countermand the last orders. The vessel sailed, a ten-gun brig. She twice missed the island, and bore up for Sierra Leone ; the third attempt she reached it, after a voyage of six months. In the meantime—viz., from January to June—the Governor had collected at St. Helena *every ship* the company had at sea, amounting to fifty sail. They were devouring the island. Fowls sold for fifteen shillings each. At last, a week or two before the vessel arrived, he had so far

exceeded his orders as to put them in charge of the admiral, who was going home with two men-of-war, and sent them off. This detention nearly ruined the company. It cost it millions."

Note added in 1850. This occurred in 1805. "The amount of property brought home in the fleet on account of the East India Company was £9,700,000 ; the private property, trade, and ships £4,600,000 ; and the duty to the Government £3,600,000."—From the *Canada Gazette*, January 18th, 1806.

TO HIS SISTER.

"LONGWOOD,

"MY DEAR ISABELLA,—

"October, 1841.

"‘Man never is but always to be blest,’ so sings or says somebody, and so I say to the flying reports of letter-bags, which would come to us if any one would bring them. It is the height of inhumanity for a captain to refuse a mail, and yet they don’t scruple to come here and tell us they have done so.

"A new arrival makes a sensation here. A certain Mr. Ducrott of the Royal Marines was ordered by the Lord Commissioners of the Admiralty to repair to Portsmouth and embark on board the *Horatio* transport for the West Indies. In due time he discovered that he was far on his way to St. Helena, and that they had made a mistake in the vessel, so we have a ‘Jolly’ additional. He is not at all concerned at his misadventure, and prefers idling here to idling in a man-of-war with the risk of yellow fever to boot. Yesterday they got up a boat race, but a canoe pulled by four negroes rowed round the others ; no boat could go near it—a clumsy thing made out of the trunk of a tree in true Robinson Crusoe style. You would be pleased to see how far these Africans are from being the stupid animals they are represented. I had half a mind at one time to take one as an apprentice and bring him home. A great many people take children in that way out of the captured slave cargoes. They soon become exceedingly attached, are very intelligent, and tolerably industrious servants. They have a great idea of mimicry. How would you like a little black lady’s maid following you like a dog, sleeping across your doorway, with nobody in the world to think of or love but yourself ? They are of so many different tribes and districts that it would be curious, if one knew the languages, to trace them out. All talk differently. A boy from Ambriz won’t speak to a boy from Cabenda, because the Cabenda people eat dogs ! but then the Ambriz people eat one another, and some of them have their teeth cut to sharp points like a shark’s or an ogre’s. It is said they are to be transferred to Demerara. It is certain they are an immense expense to Government

at present, I daresay £30,000 or 40,000 a year, and no use to anybody ; moreover, in no comfort to themselves. The climate is too wet and cold, so they die at the rate of 20 per cent. a year. Fancy the other day their finding in the *Gabriel*, a captured vessel, a batch of concealed papers, very clearly showing that our good friends the Spaniards and Portuguese have been as usual making game of John Bull. While they pretend to us to make the traffic illegal, they allow a direct premium of eight dollars upon each slave landed to the Government at Havana, of which a large share goes to Madrid. I suppose you know by this time the state of the case as to my return to England, and at any rate that I have but a small chance of eating a mince-pie with you at Christmas. I don't wish myself to leave the island before January, and do not expect to do so, *if* I return at all. I shall then complete two years of this observatory work, which, as I have to answer for the first arrangements, the most important, will be convenient to all parties. Two years will furnish three volumes of figures. Think what a voluminous author I shall be ! ”

The following sentence from his Diary, dated March 14th, 1840, shows a principle by which he was guided through life, and which was perhaps one of the causes which made him delightful as a companion and friend.

“ It is often a difficulty with me how far a consciousness of inadequate knowledge ought to prevent one from entering into a conversation or into discussion, on certain points. ‘ Every man is not a proper champion for truth, nor fit to take up the gauntlet in the cause of verity.’ (‘ Religio medici.’) I cannot answer the question at present otherwise than by this precept, if you let the restraints of humility and prudence never out of your sight, you cannot go far wrong ; if you do feel yourself in a position when you may lead and improve conversation, and ought to talk, recollect your responsibility, and do so ; if otherwise, you cannot be wrong in holding your tongue. Silence may be a duty one owes to oneself, but conversation to Society.”

In August, 1841, I was offered the observatory at Toronto, and with it the magnetic survey of British North America (see my book on the “ Magnetic Survey,” Longmans, 1883). I gladly accepted it, and was relieved of my charge by Lieutenant J. W. Smythe, R.A., some time in December. I only remained long enough to instruct him in his duties, and on 4th February, 1842, left the island in the *Northumberland*, Indiaman. I landed at Hastings on the 4th April.

Owing to delay in the arrival of Colonel Sabine's letter offering the appointment to Toronto, there was some uncertainty as to his being transferred to this post, and he says in a letter to his sister :—

“I shall probably not know until January or February at the earliest. I do not find my plans much deranged, or my philosophy much upset by the uncertainty, although on many grounds it is a prospect in which I feel a high interest. I feel that in all such matters our course is guided for us by Providence, and shall be able, I trust, to await the event patiently, and be equally contented whichever way it may go. I hope you will not have left England. My own present expectation is to be enabled to reach it by the end of April or beginning of May. The later I am the shorter must be my stay, and I shall come fully prepared to proceed to North America in a fortnight or a month or two, as the case may be. It happened, unfortunately, that the letter which offered me the exchange was an unusually long time in reaching the island, and the extra time may be considered at my expense.”

A little trait of his unselfish consideration for others is shown by a sentence in a letter from his friend Lieutenant Eardley Wilmot, dated “March, 1842, Cape Town.”

“And so you are off at last. Well, I did not think that you would have been in old England so long before I was ; but you see that you get the reward of your kindness in insisting upon going to such a place as St. Helena instead of letting me do so, to whom it more properly belonged.”

With characteristic humility this was never mentioned, and the circumstance was unknown to his family until the letter was found last year by the editor.

The Journal continues :—

The Indiamen of those days were very different from any passenger vessels in these. The *Northumberland* was as large as a frigate, and was commanded by a half-pay Captain R.N. I had half the stern cabin, and paid £80. A sort of military authority was acknowledged, the senior officer being a Captain Piggott, a quiet, little elderly man, who had saved money enough in India to purchase a majority, and was going home for the purpose. The others were young men, and I, having over seven years' service, was second in authority, which was not without results.

Our lady passengers consisted of the wife of a high official in Bengal—a young woman, rather handsome, but insufferably arrogant.

She was known as the *Burra Bibi*, or the Great Lady. Then there was a meek, patient little Scotch lady, who was taking home her husband, an army doctor, who had lost his eyesight. Her devotion to him was touching. There may have been one or two more. Then came the *causa teterrima* of all our woes—an unhappy Mrs. P——, an Eurasian, but a fine handsome woman, and, as far as I saw, quite inoffensive. Upon her it was the delight of the *Burra Bibi* to pour out her scorn, and by every feminine weapon known to wound and lacerate. In those days the Eurasians were so much looked down upon that none of the cabin passengers would have taken passage if they had known there was such a person on the list. The *Burra Bibi* chose to regard her presence as an insult. There were Company's officers on board as well as Queen's. Among these was a son of Thomas Moore, the poet. All these elements of dissension had produced a very uncomfortable state of things before I took my passage, and the captain was very glad of a new man on whom he could confer the honour of taking the *Burra Bibi* in to dinner, and sitting next her at table. Unluckily a little incident at St. Helena let loose some of the pent-up wrath. Young H—— refused to pay an outrageous charge of old S——, a well-known Jew, whose house was resorted to by visitors. His companions chose to regard this as disgraceful manners reflecting on the whole company. They sent him to Coventry. H—— was for some time too proud to notice their altered bearing, but at last it broke out in a general row. He horse-whipped M——, and little Tommy sent a deadly challenge to Buncombe, and others were involved. Fortunately I was quite out of it, and was not on deck when the explosion occurred. The senior officer directed me to convey to H—— that he was in arrest, and a day or two afterwards to preside at a Court of Inquiry, which drew up a report on what had occurred for the Commander-in-Chief. Happily, by consent of all parties, the proceedings went no further. We threw them into the British Channel, and dined amicably together at Hastings, in token of peace. Many years afterwards, when we were both generals, H—— thanked me for having saved his commission, but I don't think it was endangered.

We had a very rough passage from the Azores to the Channel. We could show no canvas but storm staysails; the headlights were, or should have been, in all the time. That graceless youth McLeod, however, one day bribed or bullied the steward to leave him his daylight. We were all seated rather dismally in the cuddy one evening, and the *only four* passengers who were on sufficiently good terms to play whist were so engaged, when we heard a loud crash then

swish-h-h. McLeod's door burst open, and the cuddy was flooded. I remember the maniacal laugh with which my partner, the *Burra Bibi*, jumped upon the table, and the captain's wrath.

I observed the dip daily when it was possible, and sometimes when it was not. These observations will be found in "Sabine's Collections Phil. Trans. 1849 and 1872," Contributions ix. and xiii.

CHAPTER IV.

LANDING, as I have already stated, on the 4th April, I was fourteen weeks in England, very busily engaged in preparing for the magnetic survey. My mother was then residing at Itchel, but I was not much at home, having taken lodgings at Woolwich to be near my work. In June I visited Falmouth by invitation of Robert Weare Fox, and this bore fruit in 1884 in the kind recognition of his surviving daughter, Anna Maria Fox, who got to associate me with the brilliant, intellectual, and scientific society that her father was wont to gather about him forty years earlier. I had known many of them, and had worked at the subject to which he was devoted. This was enough for community of interest, and this most charming old lady became our guest at Penquite more than once. We also visited her at Penjerick. She was one of the saints of her day. The beauty of holiness beamed in her withered countenance; her conversation was bright, simple, cheerful to a rare degree; she was as widely beloved as she was widely known in Cornwall.

I forgot to mention that she was a fellow-passenger of ours to Quebec, in 1884.

00 The news of the discovery of the two great Antarctic Mountains, Mount Erebus, 12,400 feet, which was in activity, and Mount Terror, 10,900 feet, which was quiescent, had just then reached England. I remember Sir William Hooker evincing considerable surprise at my expressing an off-hand opinion that no great reliance could be placed on the elevations assigned. I had certainly no business to say so, but even if we suppose their vertical elevation to have been truly determined to one second, not easy to do with sextants, their distance cannot have been ascertained by the rough methods of nautical survey within several miles. As they have never been sighted since, it remains to be seen how nearly Ross was right. He gives no data in his narrative.

I embarked for Quebec in the *Prince Regent* transport on the 14th July. The name bespeaks her antiquity. She carried two companies of Artillery, under command of Lieutenant-Colonel Morris. Transports were hired by the day, and habitually shortened sail at night to make the voyage as long as possible. Ours took six weeks. It was, however,

one of the pleasantest I have ever made, thanks to the musical talent of some of the party, chiefly a captain and Mrs. Cuddy and Colonel Morris himself. We had a concert of part songs nearly every fine day, sometimes on deck, sometimes in the saloon.

I was fully busied with observations, especially of magnetic variation, which I took daily at the request of Admiral Beaufort.¹

Nothing of interest occurred until we reached the Banks of Newfoundland, when some of us had a somewhat exciting adventure. We were becalmed, and in time we grew tired of hauling up enormous cod, two, three, four, or even five at a time from forty-fathom water. As there was a French lugger in sight three or four miles off, it was proposed to take a boat and pay her a visit. Accordingly three or four of us, accompanied by the captain of the transport, got into a small boat and pulled off. We had pulled some little way before we discovered that our boat was leaking badly, and that our sapient captain had not brought a compass. Meanwhile a fog was rapidly closing round us, and long before we reached the Frenchman we lost sight entirely of our own vessel. We could get no Cognac, which was what we wanted, and very speedily returned. The Frenchmen good-naturedly pointed out the direction in which they had last seen the ship, and promised to beat gongs to help our course. The fog had now become much thicker, and as we very soon lost sight of the fishing vessel we had nothing else to guide us; and few who have not been in anxious circumstances appreciate the extreme uncertainty of the ear as to the direction a sound comes from. After a time we heard the report of a gun fired by the transport—did it come from the right or the left? We debated, and steered in the direction which had most voices. And here I must record an excellent device of Radcliffe's² (afterwards Deputy Adjutant General of Artillery). Although so thick all round, there was a glimmer of sun overhead, enough to throw a shadow, so he drove a knife into the thwart before him, and marked the shadow when we seemed to be on the right course. By this we steered; and presently we heard the drums and trumpets. Finally, after correcting our course two or three times, we almost ran the transport down; we were nearly under her side before we saw her.

That we were very thankful need not be said, but a sense of the amazing folly of the whole proceeding almost overpowered other feelings. Had the lightest breeze sprang up, the transport could not have kept her place, and the captain, with several of his passengers,

¹ Since published.

² Now (1887) Lieutenant-General R. P. Radcliffe.

would have been adrift in a leaky boat without provisions or water or a compass !

The ship had one misadventure that might have been disastrous. In beating up the St. Lawrence the mate in charge of the deck one night neglected to put about in time, and was obliged to run the gauntlet through the Seven Islands, a notoriously dangerous group on the Labrador coast. However, Providence favoured him. He got through without running on shore, and said very little about it.

We reached Quebec on the 25th August, and after observing at seven stations in Lower Canada, I went by way of Lake Champlain to New York, sending my baggage and servant on to Toronto. I did not get to Montreal till the 15th September. On paying my official visit to Colonel Campbell, who commanded the Artillery, I was surprised by his embarrassed manner. At length the old gentleman told me, with many expressions of regret, that he had reported me to Sir Alexander Dickson for disrespect. Somebody had told him that I had passed through Montreal without calling upon him, as etiquette required. They had seen my servant and baggage ! He begged me not to give myself any uneasiness ; he would instantly set the matter to rights. In point of fact, I heard no more about it ; but the incident illustrates the touchiness of the commanding officers at what they regarded as our anomalous position.

I was about three weeks in the United States, and observed at eleven stations, not arriving at Toronto before the 23rd October. This short tour gave me the acquaintance of a large number of eminent scientific men in the chief cities and colleges of the Eastern States, with several of whom I afterwards corresponded. I may name Alexander Bache, at that time the head of the coast survey, whom to know was to love. Like Humphrey Lloyd, he had a charm of manner added to his great gifts which won all who knew him.

Then comes Joseph Henry, then a professor at Princetown. Arnold Guyot, Nicolet, Dana-Redfield, Pierce-Lovering, the last of whom alone survives, Doyen of Harvard University. My impression then, confirmed by several subsequent visits, was that there is a great charm in the frank simplicity of cultivated American society. It is less conventional than our own, conversation is more cultivated. Hospitality, if limited in form by their very different domestic arrangements, is more genial perhaps. I always got on extremely well with my American friends.

The elder Agassiz (the great Agassiz) was a professor at Harvard at my first visit. He and Guyot represented Swiss science, and both were charming acquaintances. At Washington I met

Wilkes, U.S.N., afterwards so well known as commodore. He had but recently returned from his great exploring expedition, and probably the extreme hostility to England which he manifested in the American Civil War (1861-4) was in part due to the quarrel which he had at this time with Ross. Wilkes was on his return from the Antarctic seas when he met¹ Ross in New Zealand in April, 1840, and communicated to him a chart of the coast-line of the Antarctic continent which he claimed to have discovered. This coast extended on or near the parallel of 65° S. from long. 100° to long. 167°, and in long. 163-6° he inserted there some mountains. Ross cut the line in long. 163°, and sailed right over the place where they were laid down! As he subsequently explained it, he was deceived by appearances of land, and laid it down conjecturally. He had followed it for 1,500 miles. Most unluckily for him just at that point an immense deep bight breaks in, which led Ross to his great discoveries. Wilkes cannot be acquitted of a very lax and unscientific proceeding in sketching the land or ice-barrier at least 100 miles beyond the position in which he was sure of it, but there was no necessity to tax him with intentional fudging. However, the thing was worked up into a grave charge, and much irritation grew out of it.

It might have been urged by the Americans that if they had fudged, Ross was not the man to make too much of it, for his uncle John Ross had done it in a much more bare-faced manner in 1818, when, in defiance of the ocular evidence of everybody in his ship, he drew a chain of mountains across Regent's Inlet, and turned homewards. Sabine, from whom I had the story, was with him.

Scientific and surveying vessels were almost always notorious for quarrels. Wilkes was a terrible Tartar, and when he got home he tried by court martial many of his officers. They in return brought counter-charges, which forced the Government to try him. I think it resulted in acquittal all round.

He related with grim humour how his expedition fell in with Captain —, R.N., in the Pacific. His officers eagerly poured their grievances into British ears, with the result that Captain — showed as so much the greater tyrant of the two, that he came out comparatively an angel.

Of course I paid my respects to the President, who was General Jackson, "old Tippicanee." On subsequent occasions I have had the honour of handshaking with Tyler, Millard, Polk, Johnson, and Hayes.

¹ No. Wrote to him. They did not meet.

Fillmore

I found on taking over the observatory (at Toronto) that the work had fallen terribly in arrears.

The hospitable doors of Beverley House (Chief Justice Robinson's) were not long in opening to me. I well remember my first dinner there—the lovely eldest daughter of the house, then in her twenty-second year, whom I took down, where we sat, and what we talked about. The family had not long returned from England; we had plenty to say. I thought her, as indeed she was, the most beautiful girl, with perhaps two exceptions, who had ever met my eyes. . . . However, I had no idea of falling in love, and was absorbed in my approaching journey to the north-west, though the shadow, or more truly the sunshine, of coming events then dawned upon me.

In March, 1843, it became necessary for me to make a journey to Boston to take personal charge of a set of new transportable magnetometers devised by Riddell (and Jones the instrument maker). It was a season long remembered as Miller's year, from a fanatic of that name who persuaded a great number of people that the end of the world was at hand. Oddly enough he connected it with an unprecedented fall of snow, and snow did fall in such quantities as to stop all railway traffic. The greater part of my journey was made in coaches and sleighs. I got to Boston about the 20th, and then found, to my consternation, that I must pay an *ad valorem* duty, amounting to £30, before I could obtain the instruments.

I had not the money. What was to be done? I naturally betook myself to the British Consul, who happened to be —, the novelist. I told him my story. To prove my identity, I handed him my "Route," signed by the Quarter-master General in Canada, and my orders, but to my indignation and surprise I was received with the utmost discourtesy, in fact, rudeness, and told he had no duty in the matter, and that I had no right to expect him to interfere. I was angry and indignant. Time was most precious. Two or three weeks' delay would have been fatal to my expedition that year; and at length, upon my urgency, he wrote a short note to Dana & Co., Bankers, to this effect: "This gentleman says he is Lieutenant Lefroy of the Royal Artillery. I know nothing about him. If you are satisfied with his story perhaps you will do what he requires." Happily, Mr. Dana was a gentleman. . . . A very few minutes' pleasant conversation satisfied him, and he cashed a bill on Cox & Co. for the necessary amount. The Consul's behaviour has always appeared unaccountable to me, and I did not fail to report it in pretty strong terms.

I have referred above to the "Millerites." One of my fellow-

travellers was a simple-minded old lady, who was going to Boston to be with her daughter on the awful day. It was said that many ladies had ascension robes prepared that they might rise becomingly. As has so often happened, the delusion was followed by a great reaction, under which some of its victims lost their faith in the Bible altogether.

I had but a short stay at Toronto (about three weeks) after my safe return with my precious instruments, before it became necessary to leave for Montreal.

I left on the 13th April, 1843. It was before navigation was open, and I had to travel in a common open country waggon, filled with straw, in a sharp frost. The effects of the jolting upon my instruments were disastrous. Screws worked loose, or came out altogether; some of them were nearly shaken to pieces; but there was no help for it, and they were put in order again without much trouble, excepting Lloyd's needles, which lost their magnetism.¹

I got to Montreal on the 22nd April, and found Sir George Simpson, the Governor of the Hudson's Bay Company, who had just arrived from England. To my surprise he brought me not a line from Colonel Sabine, nothing but a new compass, neither instructions, nor even a communication as to the footing on which I stood as regards the Company. The mail which ought to have arrived at the same time was late, and had not reached Montreal when I started up the Ottawa on the 1st May.² I have adverted to this in the introductory part of my book, as the consequences were serious.

It is sufficient to say here that on my return a bill from the Company for £1,277, for which no provision had been made, was presented, and Colonel Sabine threw the blame on me, even to the extent of denying that he had ever authorized me to winter in the north-west. Ultimately the Company recovered from the Government (but not before November, 1847) a sum of £850, which amply covered the real expenses. It required all the influence of Herschel to get round the Treasury.³

The letters I ought to have received at Montreal, and which arrived on the 10th May, a few days after I left, were sent on by a special canoe at a cost of £30, and I got them at Norway House on the 9th August.

¹ "Survey," p. 2.

² "Diary of Magnetic Survey." Longmans: 1883.

³ I have in a connected form the correspondence relating to this.

CHAPTER V.

JOURNEY TO THE HUDSON BAY TERRITORY. 1843.

Now begins the second act of my humble part on the theatre of life.

The night of the 30th April was my first experience under canvas. Leaving Lachine late in the afternoon, the brigade of canoes in which I had passage paddled leisurely to the Isle Dorval, a small island in the St. Lawrence, two or three miles off. Here we encamped to see that everything was right. It was a wet and chilly night, and the excitement and strangeness of everything almost precluded sleep. My equipment consisted of a small ridge tent about eight feet wide, ten long and seven high. This I shared with Bombardier Henry, my assistant. I had a large chest or *cassette* for clothes and books, a canteen and provision basket, a gun and a rifle, and about ten boxes of instruments. The bedding was made up in a roll, which furnished a seat in the canoe.

The canoes, called *canots de maître*, were of the largest size, such as were then used as far as Fort William. The whole brigade was under the command of chief trader John Maclean, a gentleman of whom I afterwards saw a great deal.

The real voyage began at not a very early hour on the 1st May ; any indulgence on this occasion being amply made up for afterwards. Our practice was to start at about half-past three every morning, and halt for breakfast about half-past seven ; when I observed for time and variation, which does not take long ; again at 1.30 P.M. for dinner. Then the other canoes pushed on, mine remained behind until I had finished my other observations ; and I seldom overtook them much before 8 P.M. Writing to my cousin Julia from Lac des Chats on the Ottawa on the 6th May, I said :

“ I should like to place you at the door of my tent to look with me over our picturesque encampment. Imagine a table of rock showing its grey face between patches of moss and grass, with young firs and cedars springing out of crevices around. Three large birch-bark canoes, the most graceful vessels perhaps that float, lie bottom upwards, with their keels to the wind, the open side to the fires. Under them, or before them, are lying or lounging about fifty

voyageurs or Indians, talking their old-French *patois*, with many profane expressions. The light plays on the white tents and on their red caps and shirts with effects worthy of a Rembrandt.

“We made the first portage to-day at the Chat Falls. Like most others on this line, their height is inconsiderable; their beauty is in the clear water shooting and darting in a hundred directions round rocks and islets clothed with graceful groups of firs and birches overhanging the channels.

“The canoes are very large, each carries thirteen or fourteen *voyageurs* and generally four passengers; mine, however, but three—myself, Captain Stacke, 71st Regiment, and Corporal Henry. Stacke is a most pleasant, good-natured fellow, always ready for anything, but rather disappointed in his hopes of sport. He accompanies us as far as Fort William. The rest of the party consists of two officers of the Hudson’s Bay Company, three or four young clerks, a half-breed from the *Columbia*, who has been studying medicine, and two women whose history I do not yet know.”

I travelled in this company until the 29th of the month, but I really saw very little of the others, being always too busy to be sociable, even in camp.

At this time there was no agricultural settlement above Bytown (now Ottawa); the Upper Ottawa was given up to lumberers, who had cleared off the large timber to a point far beyond my furthest. We left the river on the 12th at a point called Mattawa, to ascend a small stream conducting to a low *divide* between the Ottawa and Lake Nipissing, which latter we entered on the 14th, and Lake Huron on the 16th. Their difference of level is only eighty-five feet, but the descent by French River is broken by numerous rapids and one fall, the Ricollet’s Fall, which commemorates the martyrdom of some *Religious* of that order at the hands of the Hurons in the seventeenth century.

I remember our halt at Fort La Cloche on Lake Huron (May 18) by an incident which illustrates the power and value of discipline. I noticed my Iroquois *butte*, or steersman, coming out of the company’s storehouse with a can in his hand, and a manner which suggested something wrong. Going up to him I took the can quietly out of his hand; it was full of whisky, which I immediately poured out upon the ground. Laurent took his place in the canoe without a word.

The Sault de S. Marie, which we reached on Saturday, 20th May, was at that time the ordinary limit of western travel; all beyond was wilderness and prairie. There was a frontier fort and a few

houses on the American side, nothing on the British side except the Hudson's Bay trading post. I went down the rapids in a canoe, but it was no great exploit, although so reputed. We made no stay there, however, for fear of some of the men deserting, but pushed on to a well-known camping-ground, Pointe aux Pins, about seven miles beyond at the opening of Lake Superior.

Here began next morning our pleasant coasting voyage round the lake, which took a week. I crossed it in 1884 with my dear wife, by steamer, in less than a day.

I had some experience of the dangers of the lake the day we left the Pic. The brigade had as usual pushed on, while I remained behind to finish my afternoon observations; meanwhile the wind and the sea got up, and they were forced to put ashore at Pic Island. It was pretty rough when I started, but got so much worse that I would have gladly turned back, but this was impossible. A heavily laden birch-bark canoe is no craft to face a heavy sea, but we had to keep on, and by God's good providence and the strength and coolness of my two *buttes*, we effected the transit in safety, though our companions, when we rejoined them, declared that they had given us up, and were considerably engaged in erecting a cairn to our memory. The same place was very nearly fatal next year. I was detained at the Pic from the 16th to the 22nd October, 1844 by stress of weather, and as the resources of the fort were seriously overtaxed by having eight extra mouths to feed so long, I insisted on proceeding, much against the advice of Louis. There was a heavy sea breaking over the bar at the mouth of the river. By great skill Louis dodged and rolled over two or three of the rollers, then one broke fairly on board and swamped us. "Le canot est fondu ! Le canot est fondu !" broke from the Canadians at once. Louis looked back from his place in the bow with reproach in his dark countenance, then uttered some vigorous words; the Canadians began to bale out the water, and in a few minutes we were safe. But we were obliged after all to give it up. I had to land as soon as a suitable place could be found, and we were again detained until the 26th.

To resume the narrative of 1843. The grand scenery of the north shore and the wonderful transparency of the water were a constant pleasure; the rocky bottom seemed in many places to have been smoothed and polished by ice action; we could see every vein. On the 27th we halted for a short time on an island off S. Ignace, which presented as fine a display of regular basaltic columns as Staffa itself. The next day we reached the extremity of the long tongue of land off Thunder Cape; hence the *traversée* to Fort

William is about equal to the width of the Straits of Dover (about fourteen or fifteen miles), and is only attempted in fine weather. We waited some hours for a calm, and at last, starting about 8 P.M., reached the fort at midnight.

Fort William was even then but the shadow of its former self, and I found it in 1884 dwarfed into entire insignificance by the rising city of "Prince Arthur's Landing," when I met the identical gentleman, then in the Hudson's Bay service, who had made me welcome forty years before. It was founded by the North-West Company, and on their amalgamation with the Hudson's Bay Company, ceased to be a great *dépôt*, as the latter sent their stores out and their furs home by York Factory. Extensive ranges of sheds and warehouses were falling into decay.

I was three days here, and left at 4.15 A.M. on the 1st June. Here, too, I received a canoe of smaller size, the *Canot du Nord*, for my own use with its guide and crew, parting company with the brigade altogether and also with my friend Captain Stacke.

As the circuitous route then followed has long since been abandoned, and has probably reverted to its primitive condition, I subjoin an account of it which I gave to my mother in a letter of July 1st, 1843 :—

"Our course lay up a very pretty stream with only one short portage where the current was too strong. Next day, June 2nd, I had to land about an hour after starting to lighten the canoe, and to walk six or seven miles over hills and swamps. There were two or three streams to be waded, in one of which one of the women in the main party that had preceded us had got an unfortunate ducking. Stacke gallantly volunteered to carry her over. No! said one of the young fellows, let me do it! But she was a portly dame and beyond his strength. A stagger, a cry, and both rolled in the water!

"The next portage, P. Ecarté, cost me one of my superfluous luxuries. The fort had insisted on my taking on a small keg of port wine, and the fellow who carried it across took advantage of my being engaged to tap it; no doubt they all took a share. I saw at once what had occurred when I came up, and as soon as I had taken my seat, made them hand me the keg, which I pitched into the river! There would have been no safety while a drop remained.

"The beautiful Falls of Kakabeka are at the head of this portage; the second in grandeur, but hardly second in beauty to Niagara. A deep black, glassy stream without a fleck of foam pours down from the reservoir of Lac du Chiens, between high well-wooded banks, and

plunges obliquely into a chasm about 170 feet in depth. It is very difficult to get a good view of the falls from below, but at the cost of getting drenched, I managed to do so.

"June 3rd took us to the first of the long portages conducting to Lac du Chiens ; it is about two and a half miles, with a very steep hill to be passed over. To carry a heavy canoe over such a place and then return again and again for the baggage, which is carried in loads of ninety or a hundred pounds, is such labour as you would not easily imagine. We got to the foot at about 4.30 P.M., but could not get the greater part of the *butin* more than half way, and so tired were the men that though it was a frosty night, they preferred sleeping without their blankets to going back a mile for them. (P.S.—I seem to recollect, 1887, having gone back for them myself.) I could not get my tent pitched till nearly 10 P.M., but about half past three next morning, we set to work again and completed the portage, so as to start by 5 A.M.

"One of the Canadians was disposed here to be saucy to Baptiste Sateka, one of my Iroquois guides. The Indian took him up by his breeches and collar and tossed him like a dog into the canoe.

"One of the most beautiful views of the country, of which I made a sketch, occurs at the hill I have mentioned ; a wide expanse of undulating country clothed with virgin forest, with the silver thread of the Chiens river winding through it, and the blue mountains of Lake Superior in the distance—a sleeping beauty which appealed strongly to the imagination, and which I have never forgotten.

"We began now to meet occasionally with Indians descending to Fort William with the produce of their winter hunt. There was a very pretty little child in one of these canoes asleep on a pile of rugs. I caressed it a little, watching the young mother's face, but it did not evince the slightest sign of satisfaction ; a little brother or sister, who was watching the infant, was, however, less impassive, and laughed and kissed it with great glee. I gave the Indian some tobacco, as I do to nearly all I meet ; then we shook hands and parted."

On the 5th June we reached the summit of the height of land which divides the streams which flow into Lake Superior, and ultimately into the Atlantic, by the St. Lawrence, from those which flow into Lake Winnipeg and ultimately into Hudson's Bay. It is 887 feet above Lake Superior, and about 1,500 feet above the sea. Hereabouts occur a wearisome succession of very long portages.

Coming sometimes to one of these before sunrise and walking across in advance of my party, while the dank mist was hanging over

them, nothing can be conceived more silent, still and lifeless than their aspect.

As a general rule I carried a very tolerable load for a *bourgeois* : gun, barometer, desk, haversack with books, an axe ; and if we were to breakfast, I got the fire forward and made myself useful.

From the Lake of the Thousand Islands, where the traveller embarks fairly on the descending streams (and where we had very wet weather) down to Rainy Lake, the route lay through a succession of pretty lakes emptying the one into the other by short crooked channels broken by falls and rapids, and necessitating many portages. The only maps I had to help me were Franklin's route maps made in his journey of 1819, and very creditable they were to his officers, but they were at the best imperfect, so that I have since had considerable difficulty in identifying my places of observation upon more recent ones. There is not to this day any map pretending to great accuracy.

Before entering Rainy Lake we pass a wide expansion of the stream called Sturgeon Lake, which has a very fine rapid at its outfall. Laurent wanted to encamp about half-past six, upon the plea that we should not have daylight enough to run the rapids, but I objected to this ; we reached them just as the sun was setting, after a bright, cloudless day—June 12th. An Indian canoe was shooting about above them like a sea-bird over the waves. According to custom, the men were put ashore, all but the *butte* and myself. It is good to see an Indian approach a rapid. Laurent seemed to throw off twenty years at once ; jumping up on the gunwale of the canoe, a moment's glance decided him as to his course ; then jumping into his place and seizing his paddle, another moment took him into the middle of it, tossing about on waves which appeared huge to me, and shooting past rocks where one false stroke might be fatal. This rapid is in three sections, and in the second of them his paddle got jammed ; with a violent effort he freed it, and in a few more strokes we were out of the eddy and in still waters. We encamped at 8 P.M.

The Indian and his family lit their fires beside us. He had a good-looking young squaw and a number of children, shivering urchins in scanty rabbit-skin robes. We got some sturgeon, which is always regarded as fresh meat, in exchange for a little tobacco and some powder and shot.

The Indians sleep in a sitting position on their heels, cowering over the camp fire ; it was a cold night, and they looked wretched enough.

Mr. Isbister gave me a striking account of the behaviour of the

Indians at the great meteoric shower of 1833 (Leonids, Nov. 12—13). They were fishing sturgeon by torchlight in the rapids, which do not freeze, for some time, and took no notice of the unusual number of shooting stars, but as they multiplied until the heavens were full of them, they became awe-stricken, and drawing their canoes on shore, sat quietly down in a circle, waiting in silent dignity the coming end of the world. The French Canadians, in terror, were calling upon all the saints. The contrast was striking.

There were a good many Indians hanging about during my observations, softly ejaculating "Mah-ne-too ! mah-ne-too ! wonderful ! magic !" I spilt a little mercury, and they were like children in their endeavours to pick it up with their fingers and their laughter as the globules evaded them.

About twenty miles below Fort Frances, which we left on the 15th June, we came to the first regular Indian village I had seen, and landed to purchase fish. The chief came down to receive me—a fine-looking man, painted, as most of them are, and wearing a large silver medal. After shaking hands I strolled through the lodges, leaving the men to make their own bargains. There were about twenty-five lodges surrounded by stages for drying fish, with a slippery path winding among them, and I should say, ten children and twenty dogs to each lodge. The latter were as usual made of poles meeting at a point and covered with birch bark, which is cut in lengths of six or eight feet and three feet wide, capable of being rolled up conveniently, being as flexible as leather, and carried in their canoes. The squaws turned out in great numbers, laughing and chattering. The dogs were a great annoyance : more than one beast got a timid bite at my leg. I am not sure that it was here, but at one village I saw an unfortunate squaw who had lost all the fingers of both hands by frost-bite, but she had acquired a power of contracting the palms of the hands enough to hold an axe, and was actually engaged in chopping wood.

For six or eight inches of rolled tobacco we got twenty or thirty pounds weight of sturgeon.

A little below this village we came to a fleet of ten or twelve canoes fishing together—a pretty sight.

There is a Wesleyan missionary here, but not doing much good, as he can only speak at present through an interpreter. There are great difficulties in inducing the Chippeways to embrace Christianity or to send their children to school, not the least of these being the rivalry between Church of England, Church of Rome, Baptists and Wesleyans, all of whom have missionaries in the country.

We entered the Lake of the Woods (1,062 feet above the sea) on Friday, 15th June, meeting with a grievous accident in the fracture of my last barometer, by the way.

We encamped in 49° 4' (by Polaris) on Big Island, as I think, and by 8 A.M. next morning reached Falcon Island or Gardner Island, which is a mile or two south of it. We were then about thirty-five miles from the Rat Portage, and should have got there the next day ; but about 5 A.M. on Sunday, Laurent announced that he had lost his way and insisted on returning to our last night's camp to pick it up. However, we met some Indians, and one of them agreed to pilot us. He left us at 4 or 5 P.M., and Laurent, who was in a channel he did not know, got bewildered again very soon.

After abusing the *sauvage* for misleading him, he put back, but as it was then getting late and the sky looked threatening, I thought it best to put on shore for the night. Very well it was that we did so, for a terrific thunderstorm burst upon us immediately. I never saw a more magnificent sky. A fiery rainbow appeared just as the sun was setting, the space within it was bright sulphur colour, all without a heavy blue. Livid green and sulphur clouds were dashed in wild confusion over the western sky. The thunder never ceased ; one continuous growl appeared to come from every quarter at once, and was truly awful. And here I witnessed the rare electric phenomenon of flashes of lightning from the earth upwards.

Next morning, June 19th, we renewed our search for the Rat Portage, but Laurent was totally bewildered, until I insisted upon returning to the head of the lake, and by so doing recovered the track. We finally got there at 8 A.M. on Tuesday, 20th.

I have never forgotten the bright chatter and musical laughter of a group of squaws and young girls at an awkward misadventure I had in a small native canoe, which I rashly thought I could navigate across a bay. These ladies were, I was told, Delawares ; they did not appear to be Chippeways, but the Delaware tribe is generally regarded as extinct. They were clothed in a sort of chemise of rabbit-skins cut into strips. What I had done was to squat down in the bow of the canoe, which brought the stern out of the water, and it was almost impossible to guide it. A single sitter always places himself in the middle ; however, I escaped upset.

The Canadian Pacific Railway now crosses the portage, and I revisited the spot in 1884. It was at night, and I failed to recognize any features in the scene.

An accident at this station determined my visit to the Red River, which was not in the programme, and caused a delay of ten days in

my reaching my winter quarters. The Dip Circle was knocked over, and rendered for the time unserviceable.

We left the portage at 2.30 A.M. of the 21st, and the same day landed soon after noon in Lat. $50^{\circ} 10'$ to keep a magnetical term day. It was most fortunately very calm, allowing the instruments, which were in the open air, to be comfortably read off (three of them) at intervals of 5 minutes for 24 hours, commencing about 3 P.M. of local time, corresponding to 10^h Gött: Not a sound broke the silence of the night as Corporal Henry and I in turn took our station at the instruments, except the faint splash of the running stream and the occasional cry of a loon, which resembles the wail of a child. The sun set, the stars came out, and faded again as the morning dawned, still we stuck to our work; but very glad was I when 3 P.M. came round again, and we could pack up and be off, and also go to sleep in the canoe.

These observations were not of much interest, and only swelled the volume of wasted labour, for nobody that I am aware of has ever even tried to sift them or deduce comprehensive results. Working always has been ahead of thinking and accumulating data, of comparing and reducing them. I can point to my Athabasca volume, pp. 88-91, as a proof that I tried at least to do my own share of this work, but it has never been noticed because the interest of the whole inquiry was largely factitious.

The navigation continued to be of the same intricate character—small lakes, crooked channels, rapids with innumerable portages—almost to Fort Alexander, which we reached on the 25th June, and I got to Lower Fort Garry on the 28th.

A singular little incident occurred on the previous day. We had to put on shore in consequence of the dangerous sea raised by a little wind on Lake Winnipeg, and I was engaged on an observation, the men having gone to sleep in the shade, when two very pretty little Indian girls appeared, and offered me something, which looked like boiled grass, on a birch-bark dish. It had a sweet taste, but was stringy and tough. I gave them a little sugar, and as soon as I was at liberty went to look for the lodge, which I supposed they had come from. There was no lodge to be found. I could not discover a trace of the children, and nobody else had seen them! Like fairies they had vanished. I certainly did not give myself much trouble, and there must have been a lodge not far off.

The very first person I met at Fort Garry, much to his surprise and my own, was Sir George Simpson, who had passed us on the Ottawa on the 5th May. The exploits of his light canoe were the

talk of the north-west, but he urged on his men out of all bounds of humanity or reason. He was a short, thick-set man of florid Scotch complexion, could stand immense fatigue, and in particular could go an unusual time without food. Thus he has been known to start at two or three in the morning, and not halt for a meal for twelve hours.

He gave me a very warm welcome, and next day we rode on to the upper fort, where the city of Winnipeg now stands. When I revisited it, in 1884, the fort had disappeared, but I easily found the site, and identified the spot where my observations had been made.

Here I found a workman who could repair my Dip Circle, and stayed five days.

Lake Winnipeg (= muddy water), above the sea 710 feet, presents a marked contrast to most of the other great lakes, and gets its name from the quantity of calcareous matter it holds in solution.

Here I found great magnetic disturbance, and recorded the greatest magnetic force that has yet, as I believe, been observed on the globe :—

September 18th, 14·516.	September 16th, 15·382.
„ 17th, 14·393.	July . 7th, 14·414.
July . 6th, 14·462.	September 14th, 14·396.

At Toronto it was 13·942.

These, perhaps, will not be to my readers very interesting or intelligible figures, but it was largely by them that the position and value of the Magnetic Pole was—assigned viz., its position in Lat. 52° 19', Long. 91° 59' W. Its value 14·214.

It is about 300 miles from the mouth of the Red River to Norway House, a distance which took me eight days (including detentions, perhaps seven of real travelling). We arrived at the latter post on the evening of July 12th, and after a stay of two days left again for York Factory, on Hudson's Bay, on the 11th. I visited Norway House three times, and it is the base station of all my more northern observations.

July 23rd.—York Factory, being the great dépôt for the supply of goods for trade to the interior, was a large establishment, but its proximity to Hudson's Bay, and the consequent rigorous climate, the annual mean temperature being only 17° 4' Fahr., made it a very unattractive place of residence. It has no beauty of scenery. The surrounding country is a barren swamp about fifty feet above sea level.

I have given already an illustration of the great strength of my Indian Sateka. I saw here another. The men were lounging about, making holiday, when the same man took up Baptiste Ayot, the

Sancho Panza of the party, a short, thick-set, heavy man, and dropped him into an empty sugar hogshead, Baptiste, in real or pretended fright, screaming like a child.

We left York about 3 A.M. of the 28th July. For the first three days it was nearly all laborious tracking by line, along a very rough bank; then we reached the White Earth portage. There is nothing to describe in scenery; everywhere wooded banks, and never a distant view. Our encampment on the 5th August at the Painted Stone portage was, however, rendered memorable by one of the most magnificent auroras I ever witnessed.

The camp was pitched in a grove of tall pines, so that we scarcely noticed that there was an aurora until it reached the zenith, then battalions of lights wheeled and circled over the portion of sky visible to us. Great sheets seemed to be suddenly let down on our heads; many-tinted curtains in ever-moving, varying folds, all in intense motion, filled the heavens at one moment and disappeared the next.

I do not believe that the seat of this glorious display was more than one or two miles distant from the earth, and this was the conclusion from the fact that it was seen nowhere else—not at Norway House, about forty miles south, and not at any of the stations in lower latitudes where records were kept.

Two days afterwards I returned to Norway House, and the day of our arrival there, in the afternoon, was the only day in my whole tour when we ran out of provisions. The reindeer meat supplied to me at York Factory, which had been in ice nearly a year, turned so bad a day or two after we left the factory, the weather being very hot, that even the Canadians could not eat it, and it had to be thrown away. We had not enough of other provisions, and for the last twenty-four hours we had nothing, or next to nothing, to eat. My hospitable friend, Donald Ross, soon made us forget this hardship.

I took advantage of a leisure afternoon during this visit to visit the Wesleyan missionary schools and village at Ross-bank, a small island two or three miles off, and try a new canoe. It was in charge of a zealous superintendent, who a very few weeks later had the great misfortune to kill his native, or half-bred interpreter, by his gun going off accidentally.

The accident was fatal to all his influence and usefulness. He had to leave the country, but not without leaving a lasting monument of his genius. He was the inventor of a mode of writing, admirably complete and simple, especially adapted to the peculiar polysyllabic language of the Crees, in which hundreds of books have been printed, and which remains in use to this day. I am not aware

that it has ever attracted the attention of philologists, or that he ever got much credit for it.

In this system *nine* simple characters, each capable of being written in *four* ways, making therefore in fact thirty-six phonetic signs, as we might write the letter A —

A V > <—

suffice, with the aid of a few accents and terminal consonants, to express all the elementary sounds of the spoken language, and they are expressly adapted to be scratched upon birch-bark. The Indians learned it readily, and entirely appreciated it.¹

I found the Cree children (about sixty in number) bright and intelligent, but taught in an absurd way to read the Testament, sing hymns, and answer questions in some catechism in English, before they had learnt the language (if they ever did).

The question of baptizing heathen converts, living in a state of polygamy, received an illustration at this station at this time. A Cree Indian was prepared for baptism, but he had two wives, and the missionary would not receive him into his church until he had put away one of them. The poor, perplexed savage hesitated for a time, then he took the older of the two wives out with him one day in his canoe, and she never came back.

Now I cannot attest this story from my own knowledge of the parties, but it was current at the time, and on recently (1887) referring to my friend, Dr. John Rae, he said it was quite familiar to him, and, as he believed, true, though he too had no proof.

I should have mentioned that the interpreter who he so unfortunately shot was not a Cree but a half-bred Chipewyan, named Hassell, a most promising young man.

I equipped myself at Norway House for the coming winter by providing a warm *capote* of thick white duffle, trimmed with red, and with a blue hood, also for Corporal Henry a grey one, with a few other necessities, including tea, 18 lbs., loaf sugar, 160 lbs., etc. I left, as a reserve for next year, 6 lbs. of tea and 80 lbs. of sugar.

Here I lost my Indian guide Laurent, and got in exchange a French-Canadian named Blondin, reputed the best *voyageur* in the country, and the only man available who could find his way back; but he proved a lazy, shiftless fellow.

Leaving Norway House at 3.30 A.M. on the 12th August, we coasted round the north end of the lake, and reached the mouth of

¹ See a letter of mine, signed "L.," *Athenæum*, 4th February, 1854. Also, "Pétits Dictionnaire Dinl Dingie," and my geographical address, British Association, 1880.

the Saskatchewan early on the 15th. The river here is very rapid, and about five miles up, at what is termed the Grand Rapids, it is generally necessary to make, as we did, a portage of a mile.

Great was my pleasure and surprise on reaching the further end of it to find my friend John Maclean and his brigade of boats snugly encamped there. They had preceded me to York Factory, and had left Norway House before my arrival, and here they were wind-bound on the edge of a small expanse in the stream, in company with the Columbia brigade, bound for the Rocky Mountains. Seven or eight white tents were spread in picturesque confusion on the bank, keeping well in view piles of bales, boxes, barrels, and miscellaneous stores ready to be loaded into the boats. Behind them were a number of Indian lodges, and all around a motley crowd of *voyageurs*, emigrants with their families going to the Columbia, half-breeds, Indians, squaws in their blanket robes, gaunt dogs and children. It resembled a fair, doubly interesting because unexpected.

I pitched my tent near the others, and lay nearly all night listening to the monotonous drumming and sing-song of the Indians as they played their favourite gambling game, which resembles the "mora" of the Italian peasantry. They played also another equally noisy game, which consists in passing from hand to hand some small objects like knuckle bones (*dibs*). One side is, of course, intent on hiding the object, the other on declaring where it is. The song is always on one note, but the note varies, and the tone is rapidly changed, as failure, or hope, or triumph predominate. And then the loser and the winner change places, and the former begins to sing or drum and rattle sticks, until he gets another innings. At this simple game they will gamble away everything they possess, down to their wives.

Towards evening of the 17th August word was passed that the wind had gone down, and the whole camp broke up, every boat and canoe vying with the others which should be off first. I got the lead, and paddled on until nightfall, when we had much difficulty in finding a place to land. We slept *à la belle Etoile*, on a dry spot in the middle of extensive swamps, which give the neighbourhood the character of an inland delta. There was not room for a tent, or to discharge the canoe, which is invariably done at night, unless there is some very good reason for omitting it, not only for the sake of the shelter afforded by the canoe itself, but to enable any little leaks or cracks in the birch-bark to be attended to.

Fifty or sixty miles from here we reached, on the afternoon of August 20th, the newly-founded Church of England missionary

station, called "the Pas," then in charge of a young half-breed Cree catechist, named Budd, who had been educated at the Church school at the Red River. This establishment owed its origin to an Indian massacre a good many years previously, when the wife and family of a trader, who then resided here, were, in his absence, all murdered. He took the noble revenge of leaving, at his death, all his fortune to found a mission among the Indians. The will was, if I remember right, disputed, and much of the money wasted in litigation ; but ultimately his intention prevailed. There was already a small, permanent Indian settlement, and Budd was not long afterwards replaced by an ordained clergyman. At a later date he was ordained himself. He conducted me round the place with much intelligence.

The Wesleyan superintendent, —, had occasionally visited the station, and baptized some of the Indians ; but H——, a fossilized old chaplain at Red River, got wind of this, and came and re-baptized the whole of them, to the number of eighty, telling them that what — had done was of no effect. Such are, or I hope one may say were, the sad consequences of sectarian rivalry in these regions.

At the time I write of no bishop had ever visited Red River. It was the next year (1844) that the venerable Bishop of Quebec made the journey, and thrilled a sympathetic circle with the tale of his episcopal hardships. It was a brave effort for a man advanced in years, and his narrative is still well worth reading.

Between the Pas and Cumberland House, which I reached on the 22nd August, there was nothing of interest. Here I found myself on historical ground, some of the officers of both Franklin's expeditions having wintered here, and left full descriptions of the place and of its winter sports. As happened at several other places, the factor in charge was away.

It was harvest time, and I took no little interest in a field of wheat just cut, the firstfruits of the land, and the precursor of the boundless harvests which thirty years later began to flow into British granaries from this region. Nobody then thought that it ever could be an agricultural country, any more than they looked for the extermination of the buffaloes, then so numerous. The frequency of summer frosts was the reason commonly given, and the consequent precariousness of all dependence upon cultivation, although it might be very useful as an auxiliary. At the bottom of the belief there worked, I fear, an apprehension that it would be fatal to the fur trade, which it has not been.

Being very anxious to push on I made no longer stay at Cumberland House than was necessary for my observations, and got off on

the afternoon of the 24th, though to little purpose. It was blowing too hard to proceed beyond a couple of miles, but I was glad to set my head northwards.

We reached the Hudson's Bay establishment on lake "À la Crosse" on the 9th September, and stayed there until noon on 11th. The trader was away. I recollect a little incident which impressed me a good deal at the time. The 10th was, I think, Sunday. I strolled out in the afternoon into the clearing round the fort, which was uncultivated and covered with second growth. The weather being very sultry, and I, as usual, pretty tired, I sank down after a time in a lazy way on a hummock of soft, dry sphagnum, and dozed off. I was aroused, however, by the sweep of powerful wings, and collecting my senses I saw circling near me a couple of ravens that had been endeavouring to satisfy themselves whether I was dead or not. A little sounder sleep, and another swoop or two, and probably one of my eyes would have gone.

I left "Islo à la Crosse" on the 11th September. The pleasures of travelling were already somewhat on the wane. The days were getting short and the nights cold, though we were only in the latitude of Stirlingshire, and we had very constant rain. "I ate my breakfast with a plate half full of water and my tea well cooled," is a note of one day. The scenery, however, on the Churchill, improves a good deal as one advances, the country begins to get hilly, and the countless flights of wild fowl, winging their way to milder climes, were a never-ceasing interest. It was scarcely possible to raise one's eyes to any quarter of the sky at any hour of the day without seeing long streams of them. I was not a good shot, but nevertheless picked up a good many. Blondin, the guide, also had a gun, and was very fond of using it. The birds were a most acceptable change from the pemmican which, after leaving Cumberland House, became our staple provision. The portages also abounded with wild berries, raspberries, gooseberries, currants (very poor), cranberries, whortleberries, and, best of all, "poires." This last is almost unknown in England, though I once saw a fine tree growing at Sir Gordon Cumming's, in Scotland. It is the *Amelanchien ovalis*. The fruit, which gets its name from its resemblance to a pear in shape, is nearly as large as a wild cherry, and is really delicious to wayfarers. It is sometimes also called "Bois de flèche," making the best arrows, and is used as well for pipe stems.

A little misadventure on the Methy River a day or two after leaving the fort gave me a caution. Being a very shallow stream at this season, it was frequently necessary to lighten the canoe, and on

one of these occasions I got out to walk, and somehow received the impression that the canoe had passed me, mistaking the tracks of some animals here and there through the reeds for those of some of the men who were also walking. It was excessively hot, but I pressed on through a most entangled and difficult thicket, sometimes wading the stream, then plunging again into the bushes until the sun set. I then concluded I should have to pass the night there. I had neither flint nor steel nor tinder, but I had some percussion caps, and after several failures managed to explode one of them on the ward of a large key, and to light some dry birch-bark. I soon had a cheerful fire, and was congratulating myself on my success, when I heard a gun fired behind me and the shouting of the men. I had outstripped them, and was not a little glad when they came up and I felt sure of some supper. Perhaps my assistant should have followed me, only I must acknowledge that I did not make a companion of Corporal Henry. The distance which separates the officer and soldier is great, and in character he was taciturn, without a particle of vivacity, making a grievance where he could, looking with contempt on the Canadians, with whom he never associated more than he could help, and on their language, of which he hardly learnt a word except "shudder" for *chaudière*, kettle, and such-like. He was also unsociable and uncommunicative to the last degree, and I scarcely ever saw him unbend or take any part in the occasional practical jokes which the Canadians indulged in, or show a warm interest in anything; yet he was very faithful and useful as an assistant and soldier-servant, and had I been differently constituted myself I might no doubt have drawn more out of him.

Corporal W. Henry eventually rose to be sergeant-major, then was commissioned as adjutant in the first transport corps organized for the Crimean war, and finally retired from the service in 1877, with the rank of colonel. He died in 1881.

We had one pretty long portage of three and a half miles on the Methy River, and on 16th September reached what is pre-eminently called the "Great Methy Portage" of twelve miles, which must be passed before launching upon the streams which flow into the Arctic Sea. Here the Hudson's Bay Company have a road and keep horses, and I doubt not, though I don't remember it, some sort of wheeled carriages, without which we certainly could not have made the passage as we did in one day.

Nobody whose eyes have ever dwelt on the lovely view which meets them at the north end of this portage can ever forget it.

There is the valley of the "Clearwater," 634 feet below (Richardson)

stretching for thirty miles towards the setting sun, its bounding hills on both sides rising at first in gentle and then in steeper slopes, and clothed to their summits with virgin forests, at this time in all their autumnal beauty; on the western side these hills are called the Touchwood Mountains. Down the centre of this valley the silver river, sometimes cut off by a bend, but soon reappearing, pursues a westerly course, attenuated to a silvery thread as it recedes from view. Columns of blue smoke here and there marked where the Indians had carelessly set the woods on fire. I would gladly have lingered here for some time, but the sun was near the horizon, and we had a steep and somewhat dangerous descent to make. Indeed, one of our men, Cardan, got badly hurt, and it was a wonder to me how such a heavy, clumsy thing as a canoe could be carried down at all; however, we reached the bottom without serious accident, and we lost no time in making our camp for the night.

There is probably no spot in the north-west which has so many romantic associations connected with it as this camp on the "Clear-water." Here once a year, usually about 15th July, the North and South shake hands. For three months previously boats and barges, rarely canoes, have been patiently wending their way up stream, from the remotest north on one side and from Hudson's Bay on the other, to meet here and exchange freights. The former bring the furs, reindeer tongues and meat, and sometimes also passengers from the Peel River, the Mackenzie, the Liard, Great Slave Lake, Lake Athabasca and Peace River stations, some of them 1,300 miles distant. The latter bring the recruits, officers and men, destined to this Siberian banishment, the goods for trade, the clothing and comforts, such as tea and sugar and other groceries for all the posts from the distant dépôts of York Factory and Norway House. Both parties are under stress of time; and unavoidable accidents or detentions sometimes prevent their arriving together. Thus, in 1850 Dr. Rae arrived from the north a week earlier than the brigade from the south, and his men would have been half-starved had he not brought nets with him, and for the first time on record set them in one of the lakes with good success.

The brigades of boats were usually seven or eight in number, generally manned by eight hands each, and of these a large proportion were Indians; the Company preferred to employ them—first, because it kept them from hunting fur-bearing animals in the summer, and secondly, because they thus earned enough to provide themselves with an outfit against the winter.

It is hardly necessary to say that the two brigades do not actually

rendezvous at the same spot; each waits at its own end of the portage while its freight is carried over by the crews, a work of great exertion even when assisted by pack-horses; and all parties were usually too fatigued to make it an occasion of much social enjoyment, nor was there a local population to give the character of a fair to the meeting, though a good many Indians are attracted by the chance of picking up something. All this is now a thing of the past. Steam has been introduced on Lake Winnipeg and the Saskatchewan, and is about to be (1888) on Slave Lake and the Mackenzie.

At the earliest possible moment the two parties turn their backs on each other; they vanish as they came—the one pressed to supply the remote northern posts before the navigation closes, the other pressed to get back to York Factory with the furs for export in time for them to be examined and dried and repacked before the return of the annual vessel to England, after which they had still to carry a return freight to Norway House and Red River; but the opening of the Canada Pacific Railway has now altered all these arrangements.

To return to the Clearwater River. We slept there on the night of September 16th,¹ which was brilliantly clear and frosty, the stars like diamonds. I had as usual turned in after taking off my moccasins and socks, sleeping in my shirt-sleeves and trousers. I was roused, however, by a subdued growling and scratching at my bed-head, and had just time to see the bag of biscuit, which for its security I used as a pillow, disappear under the tent. I sprang up instantly, and saw an Indian dog bolting with it. Of course I gave chase, and after a good run made him drop it; but alas! I was barefooted, the stones were sharp and covered with frost, and I limped back much less triumphant than the occasion justified; but an act which would be fatal to me now had no ill consequences.

We left very early next morning in good spirits. We had crossed the Great Portage, and were entitled to call ourselves *voyageurs*. Previous to this we were but novices; "*Mangeurs de lard*" is the expression applied to all young hands. We were also nearing our journey's end and going down stream, having been struggling up stream for a month.

There are a few portages on the "Clearwater," and one morning about 5 A.M., shortly after starting, we saw three moose deer cross the stream not far ahead. I had a couple of Indians on board, one

¹ Dawson, on his return voyage, 1883, reached this portage on 4th October, and found the small streams frozen.

of whom was called the "Man Eater," probably for some act of cannibalism committed in the terrible famine of 1842; these were landed as quietly as possible, but the animals had no doubt seen us. The men returned in a short time without having found the trail.

We entered the "Elk" or "Athabasca" River, a fine stream, on the 19th; from thence it was a run of only 150 miles to Lake Athabasca, which we crossed on 23rd September, and reached Fort Chipewyan about noon on that day.

It was a pretty sight, the crossing of the lake; the men, in their gala attire, singing lustily their favourite songs, paddling with a spirit not often elicited. The whole population turned out to meet and welcome us.

Mine was the first canoe that had arrived from Montreal for twelve years. We were the heroes of the hour, and pardonably proud of the completion of a voyage of about 3,600 miles; while to me the interest was great of seeing the spot destined to become familiar by a residence of nearly six months.

Mr. Colin Campbell, the chief trader in charge, had had no intimation of my visit, and consequently no preparations had been made, but in a few hours we settled down; and food being abundant at this post, the addition of eight mouths created no serious embarrassment. The men, however, after a few days' rest and recreation, were sent off to a fishing station, and supported themselves.

Fort Chipewyan was a square palisaded enclosure of mean appearance, with a sort of tower at each angle. The total population was about thirty-five. Having been the principal dépôt of the North-West Company, there were numerous one-storied log cabins round three sides of it. The trader's residence, facing south, occupied the north side, and looked upon a number of well-wooded islands about half a mile distant. A vacant hut to the east of the dwelling was given up to me for an observatory. My men built a chimney, and, with the help of a half-breed carpenter, put in three small windows, the lower half of each being of parchment, and erected pedestals for the instruments. All this took nearly three weeks, so that I was not ready to begin taking observations before 15th October, after which date they were made hourly, day and night, by Corporal Henry and myself, and on all occasions of magnetic disturbance at intervals of about two minutes, for hours together. I do not wish to lay too much stress on this effort, but as Sabine never gave me any credit for it, I must just remark that I know of no other instance of like exertion. Riddle, writing to my mother before my

return, said: "Your son has done wonders in the way of observing, having kept up *hourly* observations for about six months, with only one assistant—a quantity no one could in the least have looked for, but which will be well worth the labour now it is done."

Notwithstanding our fireplace, we had often very cold fingers. On 22nd January the indoors temperature was 1.2° Fahr. below zero. Mercury was freezing out of doors.

The season, nevertheless, was unusually mild, and at my first arrival there were still a few ducks and geese to be had. When there was nothing particular going on among the magnets, I often spent my "watch below," as a sailor would call it, in looking after them, in company with Dyke Bouchier, Mr. Campbell's assistant; he was one of the young men who came out with me, and of the whole party, the one I liked best. We tried also sometimes to trap foxes and other animals, but never succeeded. It is common to say that the fox smells iron; certainly their cunning, which enables them often to secure the bait without springing the trap, is beyond belief. Later on we used to shoot grouse, of which there were four or five kinds fairly abundant in the woods. They all became "white partridges" sooner or later, and were so pretty that I had compunctions as to killing them.

Before the winter set in I had an opportunity of witnessing an Indian sweating bath. In this curious custom, which is partly sanitary and partly ceremonial or religious, the Crees construct a small lodge, and heat it to an intolerable temperature by throwing water on hot stones. On entering it they strip off all clothing, and then remain drumming and chanting long addresses to the "Great Spirit," for success in their winter hunt, as long as they can stand it. Two men and a woman were the performers. I handed in a thermometer to one of them, and on handing it out, although the mercury, by sudden contact with the external air, dropped almost too fast to be read, I made it over 140° Fahr.; I should think it must have been up to 170° or 180° inside. A minute or two afterwards they suddenly threw off the covering of the lodge, and exposed themselves, naked but huddling on their clothes, to a freezing temperature.

They have a playful practice of blowing the scalding air and steam on to one another's naked bodies, as a little trial of endurance. The general impression seemed to be that they derived benefit from the bath, as Russian peasants do from a very similar institution. I did not see any rolling in the snow, but I believe it is sometimes done.

We lived principally upon whitefish (*Coregonus albus*¹), a special provision of nature for man in these regions, varied frequently by buffalo-meat and moose, the latter the finest venison I know. We had a few potatoes occasionally, and usually one very small *galette* or scone; this was all the flour afforded. Pemmican is reserved for travelling. I witnessed the preparation of pemmican. A quantity of smoke-dried buffalo-meat was reduced to shreds by pounding it upon a flat stone; then a few of the most obvious bits of gristle having been picked out, the rest was thrown into a trough; to this was added an equal weight of melted buffalo tallow, and the two well stirred together with a rake. When thoroughly mixed, it was shovelled into a bag made of buffalo hide, which would contain about ninety pounds.

Pemmican thus prepared is a hearty sustaining food, not unpalatable to people with good teeth and good digestion. About three pounds a day is the allowance; it requires no cooking, though I have seen attempts made to boil it with flour, which did not improve it. It is then called "rabbaboo."

There were the remains of a library in a loft at the fort, which Dyke Bouchier and I rummaged up. I remember the Abbé B——'s "Illuminati" was a book I read, and, I think, Mosheim's "Ecclesiastical History"; but our great resource in the long evenings was playing chess, with a set of men carved out of poplar bark. Mr. Campbell placidly smoked his pipe, was not unwilling to talk, and taught us a little "Cree."

We had our festivities on Christmas Day, and drank a bottle of Madeira I had brought all the way from Montreal. New Year's Day, however, not Christmas Day, is everywhere the great holiday of the year. We were joined on this occasion by Mr. McMurray, who had walked on snow-shoes about 200 miles for his holiday; thermometer 30° Fahr. part of the way. In a letter to my sister Sophia, dated 1st January, 1844, I wrote:

"I wish you *la bonne année*, as the Canadians say, and which according to custom every person in the fort came to wish me this morning. It is a great *fête* day, on which the gentlemen hold a kind of *levée* in the morning and give a dance in the evening; for the latter I hear the fiddle tuning while I write. It is in fact the one holiday of the year for young and old. A separate reception or drawing-room is held for the ladies, at which a laudable custom exists of giving them a kiss in wishing them *la bonne année*. This old-fashioned salute is general in the country on other ceremonial

¹ *Coregonus clupeiformis* (Brown Goode).

occasions. I went manfully round the circle, including two or three old squaws, whose only attraction was a clean face ; but to estimate the force of that you should see their everyday one ! After this they have a *régale*, of which one item is a glass of wine, if there is any.

“ Our ball went off with great *éclat*. Many of the Canadian dances are pretty, particularly one called the *Chasse aux Lièvres*. There is also another worthy of being known. It is a round dance, in which the dancers join hands and dance round in a ring, one of them singing :

‘ De ma main droite
Je tiens Rosalie,
Belle Rosalie !

Qui porte la fleur
Dans le mois de mai,
Belle Rosalie !

Embrassez qui vous voudrez
Car j’aurai la moitié.’

At the last two lines the singer puts the lady on his right into the circle and they dance round her. At the first pause she gives a kiss to someone (be it observed that this is done with the greatest decorum and modesty), then she enters the ring again to the left of the singer and the dance goes on. When a man is put in he is *Beau Rose*.

“ The *voyageurs* if they see a gentleman not dancing will come to him. ‘ Ah, monsieur, ne voulez vous pas danser et avec cette dame icit ! ’ handing to you the lady who has just stood up with him. The lady takes it as a high compliment. We mustered about six or eight women to three times as many men. They enjoyed themselves to about 1 A.M. to an old fiddle and an Indian drum ; Corporal Henry exhibited some astonishing steps. . . . ”

I should have mentioned that earlier in the month of December we had some very interesting visitors. These were a party of nearly forty of the wildest tribe of Chipewyans known as the cariboo hunters. They inhabit the barren grounds north of the Great Slave Lake, and rarely come to the trading posts. These people, men, women and children, were wholly clad in reindeer skins, and of course were warmly and sufficiently clad ; they carried bows and arrows. Anthropology as a science was not then invented, and Ethnology was in its infancy. I did not take nearly notice enough of these children of nature, but I measured the stature of them all, much to their trepidation. The men averaged 5 feet 5½ inches. Although our interpreter spoke their dialect, which was in fact the language of our own Chipewyans, I did not question them, and have often

been ashamed since at not having made more of the opportunity. They stayed a day or two, and then departed to their frozen country.

The month of January, 1844, was the coldest of the winter. It is not quite settled at what temperature mercury freezes; Regnault made it as low as $40\cdot9^{\circ}$ Fahr. Professor D. Forbes in 1851 says: "There can be no possible harm in defining freezing mercury to be at 40° Fahr." Balfour Stewart in 1863 brought it as high as $37\cdot9^{\circ}$ Fahr. ("Phil. Trans." 1863). Meanwhile, there is no question of the fact that mercury did freeze, and was frozen at forty or fifty hourly readings during the month, and I amused myself by casting bullets and the like. It was necessary to cover the eye-pieces of my sextant with leather, and to be very careful not to touch objects of metal. However, I did not suffer, and on the coldest days went out on my snowshoes, very lightly clad according to modern ideas, to shoot grouse.

The month of February was $27\cdot8^{\circ}$ warmer than January, of course an exceptional difference; and with it came to an end my residence at Fort Chipewyan, which I left on 5th March.

The social and religious condition of the Chipewyan Indians has been wonderfully improved by the foundation of a Bishopric of Athabasca and Mackenzie River, but at the time of my visit it was lamentable to hear stories of their anxiety for instruction in Christianity and the arts of civilization, which there was no man to give them. This tribe, or rather race—for all the northern Indians speak dialects of the same language, and are quite distinct from those of the south—has always been distinguished for its bias towards civilized life. They were the first to adopt agriculture and build themselves houses. They were formerly notorious for brutal treatment of their women, which was partly accounted for by the exceptional stubbornness of the fair sex, so much so that it was a common remark that nobody but a Chipewyan man could manage a Chipewyan woman, but I fancy time has softened both sides. I did not hear much of this.

Writing to my brother Anthony, 1st December, I said:

"The state of the case is this. By far the greater part of the whites in this country are Roman Catholics—namely, almost all the servants and labourers in the Company's employment; of the officers the greater part are probably professedly Presbyterians, but not of a rigid stamp. They would prefer a Church of England missionary to any other. The Indians know nothing of the Gospel, but are anxiously desirous (at least the Chipewyan and Beaver Indians) of instruction. The half-breeds, the women and children born and bred at the forts, may profess one or other persuasion, but they know

nothing of either, and would at once follow any missionary who might come among them. It is interesting, in the midst of this deep religious destitution, to hear anecdotes of the natural craving of man after some religion. I met a half-breed, a man with a large family, from Edmonton, who expressed his joy that a missionary had come there at last, alluding to a Wesleyan who preceded the Roman Catholic priest, and pointed to his children to explain his interest in the subject. Mr. Colin Campbell, the resident trader here, was formerly among the Beaver Indians. They would sometimes say to him, 'You are at leisure now; sit down and tell us of the Master of Life, and how we may become good livers.' An old Chipewyan the other day, who had heard something of the sacredness of the Sabbath, was telling him how he kept it himself, and as to the difficulty he had in keeping his children from playing on that day. I have been surprised to hear that the Indians in many instances observe the Lord's Day, knowing so little of religion. Probably they do so on superstitious grounds; but it shows a readiness to receive instruction, and indeed of all the Indian tribes the Chipewyans are from their character the most hopeful subjects of experiment. They are remarkably cautious and provident, a timid race of men, very acute for their own interests, and rather better off than their neighbours. The tribes speaking the same or cognate languages number at this time about 7,500 souls, but unluckily their language is exceedingly difficult. They mostly, however, speak Cree, which is very easy, and there are plenty of interpreters to be found."

CHAPTER VI.

I LEFT Fort Chipewyan, as already noted, on the 5th March. Out of some fifty or sixty powerful dogs maintained there for purposes of transport, three of the best were selected for my "cariole"—Papillon, Milord and Cartouche ; two other teams drew the sleighs which carried my instruments, baggage, bedding, provisions and stores, each load about three hundredweight ; there was a driver to each sleigh besides the guide. It was a cold, bright day, and we started with spirit, dogs barking, whips cracking, men running on their snow-shoes. This soon came down to a most sober gait. I had quite a narrow escape from losing my eyes a very few miles from the fort ; the path gave a sudden turn, and only by an intuitive dodge I escaped a young fallen spruce fir that was charging a hundred bayonets down the road just at the level of my face. The first day's journey made it abundantly evident that Corporal Henry was quite unfit for the journey ; he had scarcely ever taken snow-shoe exercise and got the *mal-de-raquette*. The second day I gave up the cariote to him, and we managed to get him along. In a few days he accustomed himself to snow-shoes sufficiently to walk occasionally, but proved a poor traveller. I took a turn every now and then, but it was so bitterly cold in the narrow, coffin-like carriage that I preferred walking. Our track lay along the bed of the Slave River, which we did not often leave. I here saw for the first time the great plasticity of ice. The ice in the centre of the stream was sunk many feet below that at the banks, and often moulded itself to the bottom and showed every shoal. We had capital sheltered encampments generally.

I have said that the cariote was bitterly cold, and have a vivid recollection of getting out of it with the sensation of being frozen to the marrow ; but this must have been an exceptionally cold day, for I find that I reported the contrary to my mother.

I wore a chamois-leather shirt and drawers over woollen ones, and a coat or *capot* of blanket with a hood to draw over the head, blanket, socks, and of course moccasins, which are both put on dry every night, this is most important to avoid frost bite. I was

sometimes prevented from sleeping at night by cold, but the men, who lie in a heap, rarely complained of it. They take it in turn which shall turn out first in the morning to make up the fire, the rest lie snug until they hear it blazing.

Two nights are much impressed on me, one when we encamped on a small naked island of rock on Great Slave Lake. It was intensely cold and near full moon. McMurray was then travelling with me, and we lay down to sleep side by side. I slept at that time in a bag made of one blanket, and with a second over me. Again and again I woke half frozen to find that McMurray in his sleep, by persistent wriggling, had got all my blanket from me and wrapped well round himself. Then came a tug and a struggle until I repossessed myself of it, only to repeat the same process after an hour or two. The other occasion was one of unusual comfort and prolonged sleep, which I found to be due to a light fall of snow having buried the whole encampment. I was often warmed by Papillon, my biggest dog, worming himself under my blanket and stretching his body by my side.

Very amusing scenes often took place in the morning in catching and harnessing up the dogs. No one but Landseer could depict the expression of profound dejection, dismay and finally resignation which their countenances assumed when called up. At the first outcry, "L'Anglois ! Papillon ! icit avance, avance donc L'Anglois !" some put their tails between their legs and sneak in a guilty manner away, some pretend not to hear, some bury themselves in the snow or hide behind trees. Woe to the dog that obliges himself to be fetched. At last they are all got together in their respective teams, and we leave the well-sheltered emcampment with considerable reluctance, to take to the ice. The dogs do an astonishing amount of work, but differ in strength and spirit quite as much as horses. They are fed at night. More than once when we reached the spot where a supply of frozen fish had been *caché* there was not a scrap ; a wolverine or perhaps a starving family of Indians had been beforehand. In such cases the dogs get nothing till next evening ; nothing is thought of leaving dogs unfed for a week or more, and when not in work they live upon such scraps as they can pick up about a fort. They are too valuable to be allowed actually to die of starvation if there is any food at all to be had ; short of that they take their chance.

I remember very well a remarkable atmospheric effect which helped us across Great Slave Lake. As we started from the southern shore we saw plainly before us Pointe Brulé on the northern shore, forty miles distant, lifted by unusual refraction above the horizon ;

it was sharp and distinct, but after we had walked towards it some miles the conditions changed and it completely disappeared, nor did we see it again until we neared it. This must have been the night of my little experience of sleeping in a bag, but I cannot identify the island.

We had some very mild weather during this March. For instance, on 23rd March the temperature at daybreak was 35° Fahr., and on 25th at the same hour, 41° Fahr.

I reached Fort Simpson on Mackenzie River on 26th March, after nineteen marching days, deducting stoppages, making an average of a little more than twenty-four miles a day.

I had pleasure in being again greeted at Fort Simpson by my friend John McLean, who was second officer of the fort. The first was a Mr. Lewis, who had had the misfortune to blow his right hand off some months previously, and was in consequence going home. It was a terrible accident to happen far from surgical aid, but he had as an assistant a young fellow of nerve and decision, named, I think, Pears, who tried to dress the stump. To stop the bleeding he tied up every vein and artery he could get at; he then bathed the wound with a decoction of epinette, which is much used in the country for external applications; and, although much reduced by loss of blood, Lewis's strength of constitution enabled him to gradually recover. His chief suffering at this time was from cold, to guard against which he wore a sheath of warm fur up to the elbow. On the other hand, he entirely lost his neuralgia, from which he had suffered much before the accident.

I may as well add that when he got surgical advice at home, the decision was not to disturb the cure. The stump was not reamputated.

Mr. Lewis bore a considerable resemblance to the Duke of Sussex, and was proud of relating how often he had been taken for him on a previous visit to England. His wife, who was half Indian, always honoured us by appearing at meals, and was nearly the only half-breed lady I ever knew to do so.

My life at Fort Simpson was greatly influenced by the advance of spring, which, before I left, confused day and night to such a degree that there never seemed to be any proper time either for going to bed or for rising; while the rapid burst of vegetation in May gave everyone a restless desire to be out of doors. Mrs. Lewis and her children were all day snaring birds, rabbits, and small animals. 3 A.M. generally found me with my gun trying to get a wild-duck or two off a small pond there was near the observatory. The fort

being on an island, cut off from the mainland in rear by a rather broad channel, my walks were circumscribed. I was greatly interested in finding quite large pine timber, a few cattle, and a productive farm of thirteen acres, where they grew barley and potatoes. But provisions were not very abundant, and the bulk of the population subsisted chiefly on rabbits. I believe wheat is now grown, as it was even then at Fort Liard, about 160 miles to the south; and had agriculture entered into the policy of the Hudson's Bay Company, there need have been little want in the country. As it was, there had been great scarcity for three or four years, and a frightful famine only the previous winter, accompanied by numerous acts of cannibalism. The Hare Indian woman who washed for me, known as the "*Femme du Diable*," was protected from her husband at the fort, because he had killed and eaten one or two other wives. Some starving women, who had already eaten their husbands, fell upon two Scotchmen who were carrying a mail, killed them as they lay asleep, and devoured them. They told me at Fort Good Hope that the scenes enacted just outside their palisades were harrowing. The cause of it all was the failure of rabbits from some epidemic, and of reindeer, due to the senseless folly of the Indians. In the spring of 1839 or 1840 there was unusually deep snow, and the animals lay at the mercy of the Indians, and could not escape; yet no argument or entreaty could make the Indians refrain from killing young and old alike. An Indian cannot stay his hand, no matter whether he wants food or no. Precisely the same thing occurred about the same time near York Factory, and the reindeer forsook the country for several years.

The Hare Indians, a branch of the Chipewyan family who inhabit the country round Fort Simpson, were honourably distinguished from other tribes by their better treatment of women, and by the men taking their full share of all household labours and duties. Another branch of the same large family in New Caledonia has the singular custom of requiring the survivor of a married couple, be it husband or wife, to go through an ordeal not unlike the "suttee," that is, to be burnt upon the dead body, only not to death. Since my time, however, the language, mythology, and customs of these races have been much better investigated, though I know of no good English book about them. The best is by the Abbé Petitot, in French.

I carried on hourly observations as assiduously at Fort Simpson as I had done at Fort Chipewyan, and was much puzzled by the immensely greater range of variation of all the magnetic elements.

Subsequent observations continued at Fort Rae (Dawson, 1882-3) have shown that as the season advances and the sun is above the horizon a greater number of hours, the diurnal movements towards the summer solstice are about twice as great as at the winter solstice.

The ice in Mackenzie River broke up on 25th May, and within a very few hours we were all afloat. This annual phenomenon had often been described to me as one of the grandest in nature, but whether it occurred at night, or was unusually quietly done, for some cause it did not make a great impression upon me. The ice was about three feet thick, and huge blocks were thrown up on the shore in every direction. We were only four days in descending, with a strong current, to Fort Good Hope, my most northerly point, and made but one stop for a few hours, at Fort Norman, by the way. I was enabled to land, however, to inspect more closely a great landslide that had recently occurred at Gros Cap, in latitude 64° , near the fort.

Fort Good Hope was marked on Arrowsmith's map as just within the Arctic circle; to my disappointment it had since been moved about two degrees to the south, and was now placed in latitude $66^{\circ} 16'$. We arrived there on the 29th May, and stayed thirty hours. The weather was cloudy, but not unfavourable for magnetical observations, and it was as light at midnight as at noon. Here I got my greatest dip, $82^{\circ} 55' 9''$, and it was here, as I have already mentioned, that the famine of 1842-3 was felt in its greatest intensity.

We started southwards again on the 31st May, with a strong northerly wind and in a blinding snowstorm, which accompanied us nearly to Fort Simpson. We put ashore once a day to boil the kettle, but only halted at Fort Norman. In these latitudes, where there is scarcely any variation in the light through the twenty-four hours, it is impossible after a day or two of cloudy weather to guess the time of day. I had a proof of this in an inquiry of our steersman what o'clock it was. I told him about five o'clock. "Bien, monsieur," said he, "cinq heures de demain matin ou cinq heures d'hier au soir?"

M. Dechambault, the trader at Fort Norman, was rather an interesting person. He was said to be a man of good private fortune, the owner of a *seigneurie* worth £700 a year in Lower Canada, but for the pleasure perhaps of saving money or for the charms of solitude and perfect freedom, he remained on year after year in this Siberian banishment and was quite contented. The soil in his garden thawed

about fourteen inches in the summer, and he could grow a little barley and very small potatoes.

At Fort Good Hope, by the bye, they could only, as they said, grow turnips.

We made an unusually rapid passage, and reached Fort Simpson again on the 5th June. I did not resume hourly observations, as it was uncertain from day to day when I should have to leave, but I repeated the determination of magnetic intensity, obtaining very nearly the same result as before.

We left on June 15th, in two or three barges under MacLean. The current was so strong that our progress was slow and chiefly by tracking, employing a good number of Indians. I seldom had an opportunity of landing for observation.

We reached Fort Resolution on Great Slave Lake on 22nd. Here I found my canoe and crew, and took leave of the brigade to follow the same route as that by which I had arrived at the same station in March. Very different, however, were the conditions. The spots where we had camped in the snow and shivered over the fires were hardly to be recognized in their midsummer verdure. I remember the odd appearance in one place of a dozen or two of small brown owls blinking in the sunshine, and the terror of Baptiste Ayot, the Sancho Panza of the crew, when one of them suddenly gripped his leg, "Il m'a poigné, il m'a poigné, oh ! oh !"

On the afternoon of the 25th June we reached the Portage de Grande Détonr, and while I stayed behind at the landing to make my observations, the men started across with their loads and met with an adventure. The track crosses a prairie, which was evidently at no remote period the bed of a small lake ; the two foremost, who were a long way ahead of the rest, had reached the middle of this prairie before they perceived a brown bear making straight for them. They halted and set down their loads, shouting and doing what they could to frighten him, but Bruin took no notice of their noise, and was drawing disagreeably near, when a third man came up ; this was Blondin the guide, who had a gun. He joined his two affrighted comrades and let the bear, who still came on, approach to about ten yards ; then he turned a little and Blondin fired and killed him. Corporal Henry and I did not join the party until it was over, when we helped to eat some of him, but my impressions of bear meat are not in its favour.

It took us two days to carry the canoe and baggage across this portage. We re-embarked on Salt River, a small stream flowing into Slave River, on the 27th, and finally arrived at Fort Chipewyan on

the 30th June. It was very pleasant to see again in summer verdure a place I knew so well in its winter garb.

I only remained long enough at Fort Chipewyan on this occasion to repeat my observations of last autumn, and left it on 4th July. I had made up my mind that it was possible to ascend Peace River as far as Dunvegan, cross the plains to Edmonton and reach Canada before the closing of navigation, and so indeed it proved, but it was a very close thing. This noble stream, one of the main arteries of the continent, and chief feeder of the Mackenzie, which takes its rise in the Rocky Mountains, was at this time almost unknown to geographical science, and I confess that a desire to be the first scientific traveller to visit it had much to do with my decision, and I took unusual pains to make a track survey as well as to describe its features from day to day. The unfortunate loss of my journals in 1846 deprived me of nearly all the fruit of this labour.

Peace River, although 5° or 6° of latitude north of the Saskatchewan, presents more luxuriant vegetation, and many of the characteristics of a milder climate. I cannot speak with statistical precision, not having at hand the observations made of late years, but I believe it has actually been found a more fertile region. Our progress was slow against the stream, but as there is only one portage at the Falls, and I was anxious to push on and could not afford long halts, I did not make many observations.

I found a genial, simple-minded trader in charge of Fort Vermillion, afterwards, I do not know when, renamed Fort Lefroy. He had a large family; one of his little girls said something to him in "Cree," and he turned to me with the inquiry, "Do you know what she said? 'I never loved a chief before, but I love him mah-ne-maga, above anything!'" showing an idyllic simplicity rare in this age.

Indians are not numerous on Peace River. They are a Chipewyan tribe, called the Beaver Indians by the traders, and held in great respect. I heard a touching anecdote of a poor mother who had lost her infant. In her wild despair and darkness she cut off her own breast, placed it on the cold lips of the child and hanged herself.

I reached Fort Dunvegan, my furthest point on this river, on 22nd July, and for the first time fixed its geographical position, which had fluctuated between longitude $7^{\circ} 30' W.$ and $8^{\circ} 52' W.$ Thirty-nine years afterwards, Mr. F. King, of the Dominion Survey, repeated the determination, and I take some satisfaction in his confirmation:

	(Latitude.)	(Longitude.)
Lefroy, 1844	$55^{\circ} 55' 36''$	$118^{\circ} 40' 45'' W.$ (By Lunars.)
King, 1883	$55^{\circ} 55' 38''$	$118^{\circ} 36' 1'' W.$

I stayed here four days, one of which was kept as a term day. The trader was a brother of my companion at Fort Chippewyan, Mr. Dyke Bouchier; he was married to a half-breed Indian woman. Nothing could exceed their hospitality.

Peace River runs here in a deep narrow valley at a depth of 400 feet, which it has apparently cut for itself. The neighbourhood is well wooded, and was even then known to offer beds of coal, which I found cropping out on the side of a ravine; it was not of good quality. I expected to find the Rocky Mountains in view here, but such was not the case. The rise of the great plains towards the base of the mountains is so gradual that they are not seen until they are nearly approached.

We took our leave on 26th July, and I was much interested to see my men, each cap in hand, and with the manners of a courtier, respectfully approach Mrs. Bouchier and the other half-breed woman, and one after another bid these ladies farewell with a kiss.

Having to cross the plains to Edmonton, I left my canoe here, and crossed the river. A drove of half-wild horses were in waiting on the further side with a few Indians, half-breeds, and their wives, who wished to accompany us. These women all ride astride, and I was much struck with the comfort and perfect modesty of this arrangement. Saddles are unknown; the substitute is a cushion made of a number of small skins; the bridle is a cord round the animal's lower jaw.

Smoky River, which we crossed on the third day, takes its name from a solfatara higher up, which I visited at this spot, called "The Smokes." There are a number of crevices lined with small crystals of sulphur, which are always emitting smoke. It will doubtless at no distant day be a health resort. I saw no signs of volcanic activity. The small lakes in the neighbourhood are horribly impregnated with sulphuretted hydrogen. It rained all the time, and I was truly glad to get back to camp at a late hour after dark. Riding behind our Indian guides, I was much reminded of the moss troopers of the Scottish border as we pricked on without drawing bridle, or looking to see who followed, through swamps and thickets hour after hour.

We reached the fort on Lesser Slave Lake a little before noon on August 2nd. The gentleman in charge had had no notice of my coming, but fortunately there was no lack of provisions at the station, and he made us very welcome.

Here I stayed until the 5th, and fixed its geographical position, which was previously very uncertain.

The scenery about Lesser Slave Lake is uninteresting, but improves towards the eastern end, where the lake drains into the Athabasca River. I was very fortunate in finding a canoe at the fort, and in crossing the lake on the 6th we had the rare good fortune to overtake and kill a moose, which was swimming across it—one of whose great cleft hoofs I still possess. Some Indians appeared afterwards and claimed a share, as they declared they had driven it into the water. I do not doubt that this was true, and we acted liberally in giving them the greater part of it.

We reached Fort Assiniboine on the 10th, not making more than twenty miles progress a day against a very strong current. I have but an indistinct recollection of it. Here I found a young Wesleyan minister, named Rundle, who was waiting, with his interpreter, for an escort to Edmonton, and asked permission to join my party. A scene I can never forget was the crossing of this river, thus described in a letter to my sister Isabella :

“It is a tremendously rapid river. We passed over the baggage in a log canoe. Then we had to get the horses across—wild animals not backed for months ; never shod or trimmed, tails, manes, and forelocks as wild as you can conceive. There was a steep bank which we drove them down, and one by one forced them to plunge in, some of them rearing, trembling, and trying by all possible means to escape. There was an Indian woman, with her long black hair streaming behind her, brandishing a long stick, with all the dogs in excitement, and the Indian lads shouting at them, ‘Ho ! ho ! hurrah !’ until they were all in. Once in the water they sank until little but their heads were visible. They swam across in groups, and were carried a long way down by the current. I rode one of these animals one hundred miles with nothing but a thong tied to his lower jaw. Though imperfectly broken in, all these horses are good-tempered, and quite free from vice, and much more easy to manage than our own. They are terribly persecuted by the wolves. At Edmonton, where they are obliged to keep them in the woods, and at a distance to prevent their being stolen by the Blackfeet, from one hundred to two hundred are lost every year.”

I left Fort Assiniboine on the 12th August, and two days after had my own first experience in swimming a horse over a river, which gives a somewhat peculiar sensation. I was surprised at the depth to which I sank—up to the waist, the horse's body nearly perpendicular ; but the motion was easy, and it appeared to be no great exertion to the horse. My travelling companion liked the looks of it so little, however, that after crossing I had to return to bring him over. On

this occasion we made a raft to get the baggage across. Poor William, the missionary's interpreter, got into sad disgrace, culminating in a few strokes with the whip, for letting his employer's baggage horse get a bad sore. Many of the horses had frightful sores such as I never have seen before or since. All that was done was to shift the load to another horse.

I found Mr. Rundle a good little man, very young and inexperienced, and of no obvious fitness for his calling, and very ignorant. I thought to introduce Keble's "Christian Year" to him, but he shook his head over the passage in the poem for Communion of the Sick—

"Where shall we learn that gentle spell?
Mother of martyrs, thou canst tell";

and I found that by "mother of martyrs" he understood the Blessed Virgin.

He greatly felt and lamented his own exclusion from church privileges, and asked my opinion of the propriety of administering the Holy Communion to himself alone.

I took an opportunity at one of our camps to put his interpreter, who was a boy of, I suppose, not over fourteen, to a test as to his capacity. I gave him a passage of a few lines taken out of an easy part of one of the "Articles of Religion" to translate into Cree. Two or three days later I gave him his translation to put back into English. He did it better than I expected, and certainly reproduced the sense, if not the language.

I was received by Mr. Rowand, widely known among the Plain Indians as the "Big Mountain"; he was a powerful, but not very tall man of rough, determined aspect, and very lame from an early accident. Hunting alone as a young man he had been thrown from his horse and had broken his leg. By some means intelligence reached the fort of what had occurred, and before the whites could do anything an Indian girl had mounted and galloped off in the direction indicated. She found him, nursed him and saved his life, and he married her. She was a middle-aged woman when I saw her. Years afterwards I met their son, a doctor, in Quebec.

Rowand's authority among the Blackfeet tribes was such that I should not have hesitated to accept the safe conduct he offered me, to make a little tour to the South Saskatchewan under the guidance of one of the chiefs, but for two reasons—one was that time did not permit it, the other was of a totally different nature. There still existed a form of hospitality among them characteristic of the most primitive races, and which, when Lewis and Clarke for the first time crossed the continent in 1805 was universal west of the Mississippi.

The ethnologist will know to what I allude¹; I did not wish to encounter it. Chistian instruction, which has now reached even the Blackfeet, and closer intercourse with a more advanced race, have caused this barbarism to disappear.

I left Edmonton on the evening of August 19th, in a small barge provided by Mr. Rowand, and as the Indians on the plains were at that time in a state of ferment, he supplied me with muskets and ammunition for the crew. He advised me also to avoid observation and travel as much as possible by night, for though it could not be said that the hostility of the Indians was directed against the whites, a white scalp is as good as another, indeed better; and an unsuccessful war party led by a reckless young chief would probably not be at all particular. This gave a spice of adventure to the next few days' journey, which was an agreeable change from its usual tameness. The first night I took the helm, as we merely drifted with the current, and there was nothing to do but to keep the boat in the stream. I startled the men who were sleeping, nearly out of their senses by firing at a couple of elk which came down to drink. However, we had no adventure for some days. We never slept on shore, but looked out some secluded spot to land twice a day for breakfast and supper, where our smoke was not likely to be observed. We reached Fort Pitt on the evening of the 21st.

Fort Pitt I found to be a trading post of the second rank, but rather more defensible than many larger ones, the Indians being a real danger. Not many weeks before my arrival a harmless party of Crees were coming to the fort to trade, when some vagabond Blackfeet attacked them, killed two or three, and would have killed them all if the people in the fort had not sallied out and driven them off. Among the survivors was a squaw, who was shot through the body; the bullet had entered her chest rather high and passed out at the right shoulder. The wounds externally were nearly healed, but she was persuaded that so great a medicine-man as I passed for could do her a great deal of good, and she would not be satisfied until I did something—that was to stick a patch of diachylon plaster on the scars, which quite contented her. After this one or two Indians brought me their guns to charm; I found a drop of red sealing-wax on the barrel very efficacious.

We reached Carlton House on the 25th, and here I gave up my muskets, as the Plain Indians rarely range much beyond that part. There were a good many lounging about in all their finery. In one of their lodges there was an extremely handsome young squaw, as it

¹ *Fœminas mariti filice se ipsas in usum hospitum cedebant.*

proved a bride ; the upper part of her face was painted a bright vermilion, the lower part black. As I was rude enough to look rather fixedly at her, she turned round and faced the wall of the lodge, a rebuke I felt I had deserved. She was an Assiniboine beauty, with fine regular features, a good figure, and the coal-black eyes of her race.

I have intimated that there was an adventure in store. Leaving Carlton on the 26th August as usual in the evening, and it happened to be a dark night, we were hailed from the bank in some language which was not Cree ; and further on I became very conscious in the pure night air of the smell which proceeds from a large number of horses, though it was too dark to distinguish objects on shore. We kept in the shadow as much as we could, and thinking we had passed all danger, about half an hour later, I made for land to cook our supper. The spot selected, which I thought to be an island, had a high wooded bank, and was dark enough for any purpose of concealment, there being no moon. The fire was lighted and the kettle hung, well filled with buffalo hump and tongues, when my ear caught a faint distant sound, which became louder and nearer. The men now heard it and took alarm, "*Les Assiniboines, les Pieds noirs !*" they shouted ; "*Embarquez, M. Lefroy, embarquez !*" and seizing their own kettles, they tumbled down the bank and into the boat in a twinkling. I confess I was carried away and followed them, but I had enough presence of mind to return and possess myself of the kettle containing my supper, which in the confusion had been left on the fire ; and as soon as I had gained the boat we pushed out into the middle of the stream. Here we lay on our oars to listen. There was dead silence for a moment, then a loud outcry of hooting of owls, cries of animals, dogs and wolves, burst from many parts of the wood we had just left, giving us no reasonable doubt that Indians had been stealing upon us. It was they who imitated the cries, as they are accustomed to do. We stayed no longer in their neighbourhood, but crossing silently into the shadow on the other side, we escaped an awkward surprise.

I asked Baptiste afterwards if he thought the savages wanted to cut his throat. "*Je ne sais pas, monsieur,*" was his reply ; "*Je ne serais pas le premier homme qu'ils ont servi de même.*" This was too true to be contested.

I reached Cumberland House on the 29th of August ; just one year previously I had left this station to go north. The interval comprised my hardest work and most varied experiences. I had never had an hour's illness or met with any serious disappointment.

I should have said that although in descending the Saskatchewan I saw little of the countless buffaloes supposed then to roam over those boundless plains, and could not do so because the river is sunk between high banks. I did see one very large herd and occasionally a deer or two ; wolves were very common, trotting along the bank abreast of us.

I was struck by an extraordinary example of the effect of alcohol upon perfectly uncontaminated systems. We had taken two young Indians into the boat ; they found a small keg which had contained spirits, but quite empty ; they put in some water, rinsed it out and drank the liquid ; in a very few minutes they were both lying in the bottom of the boat helplessly drunk.

My voyage from Cumberland House to Norway House, where I arrived on the 6th September, offers nothing noticeable except the running of the Grand Rapids on the 2nd, of which I thought a good deal at the time. It is very much more formidable than the "Sault de S. Marie." It saved us, however, a long portage. I again coasted the north end of Lake Winnipeg, but as I have nothing to show, I suppose the weather was against observations.

I reached Fort William again on the 10th October without any particular mishap, and left it on the 12th. Forty years afterwards, in 1884, I met at Arthur's Landing, a hale old gentleman who told me he had been my host on this visit. Our progress along the north shore of Lake Superior was very slow, but we arrived at the Pic on the 16th ; here we were detained by stress of weather until the 21st.

I should mention that one of the five days in 1844 was a day of detention at Cape Gargantua. Had Longfellow's poem of "Hiawatha" then been written, I should have been greatly interested in this classical spot ; as it was, I fully appreciated it as delightfully sheltered and picturesque.

Here my men devoted a sop-stick to me—a sop-stick being a pine tree, the straightest and tallest that can be selected, which, after being stripped of its lower branches, is dedicated with libations to some person, a compliment in my case all the more sincere as I had nothing to give them.

My short stay at the "Sault" on this occasion was marked by a very painful incident. One of my men named Narcisse Arel, managed to get at spirits, and drank to such excess that word was sent me he was dying. I found him insensible and could not get any blood to flow from his arm. I then gave a cut with the lancet across the temple, but scarcely a drop of blood followed, and he actually died, though at what moment I could not say. There was

no doctor and no minister on our British side of the "Sault," of course no coroner. We dug a grave next day and buried him, but previous to this the body was laid out and a kind of service performed, in which the guide Louis took the leading part. Standing at the head of the bier he uttered a long prayer in his own language, most impressive in voice and manner, but no one understood it sufficiently to interpret. The other men were very reverential. As all were Roman Catholics I did not interfere at all, but merely attended the funeral.

Having heard that the celebrated American sportsman Colonel Crockett, immortalised by his dialogue with the Coon, was the officer in command of the United States troops on the other side, I went over one evening to call upon him. It was about eight o'clock, and he had gone to bed, but being made to understand that a British officer wished to pay his respects, he sat up and gave me a courteous reception. Under the circumstances I shortened my visit. He was in a very bare barrack room, and an empty whisky bottle on the table helped to account for his early retirement.

I left the "Sault" on the 5th November, and reached "Penetanguishene" on the 14th. Winter had set in, and although the lake was still unfrozen, smaller bodies of water had become ice, and every drop splashed from the paddles froze where it fell. It was therefore great *misère* for the men. I was warmly welcomed by Captain or Lieutenant West of the 83rd Regiment, who commanded a small detachment stationed there (with what object it would be hard to say), and indulged myself with a day's rest and enjoyment. West had a tame otter in his rooms, the only one I ever saw; it was as playful as a kitten, a very pretty pet.

"Penetanguishene" was, and indeed still is, very much out of the world. The clergyman, a Mr. Hallen, told me that going one day to his church, he found the road in the possession of a brown bear. The animal showed no disposition to be rude; on the other hand, it did not make way for him—he had to make a *détour* himself. The blacksmith of the village had the previous year caught a young bear cub, which grew quite tame in his family. As cold weather came on the place it chose to hibernate was under his forge, and it remained there all the winter quite undisturbed by the noise overhead. When, however, the spring returned, all its acquired tameness disappeared, and they were forced to kill it.

My entry into Toronto, where I arrived about 8 P.M. on November 18th, was a noisy one. Louis the Iroquois and the two half-breeds accompanied me in a separate waggon, and as I found it

Impossible to prevent people from giving them spirits on the road, they were in a high state of exhilaration, singing their canoe songs at the top of their voices, as they were accustomed to do on arriving at a fort. I was fortunate enough to meet Mr. Dease, the former companion of Thomas Simpson, and as he was going to Montreal next day and had known Louis of old, he kindly took charge of them ; they gave him the slip, however, at Kingston, and when I arrived at Montreal myself on the 25th November, nothing had been heard of them.

Here ended my tour. I had still a little business to settle at the Hudson's Bay House, Lachine, and to report myself to the military authorities, which done, I returned to Toronto, and arrived there on the 5th December.

CHAPTER VII.

January 4th.—"Mrs. Robinson (afterwards Lady Robinson), with Miss Emily and the fair P. H——, came to see the observatory and a few curiosities from the north."

Such is the first introduction in my journal of a name soon to be so dear to me. Within a year I was engaged to Emily.

My intimacy at Beverley House gradually increased. It was the house at which all the best society was to be met. Mrs. Robinson, then about fifty-two, still retained much of the great beauty of her youth. She had a most charming manner—lively without being light, dignified without being stiff; and supported as she was by three charming daughters, no wonder the house led society. Lady Robinson afterwards told me a romantic story, which remarkably illustrates her strength of character.

When a very young man, before his marriage, which was on 5th June, 1817, a daughter of ——, fell desperately in love with Sir J. Robinson. She was older than he, and was a fine, handsome woman, of great energy and unusual talent. But he never reciprocated the attachment, and gave her no encouragement whatever; he never flirted with her, or indulged her fancy in any way. She, on the other hand, was perpetually writing the most passionate letters to him, and continued to do so, to her (Mrs. Robinson's) unspeakable indignation, after their engagement.

When Mrs. Robinson returned to Canada after her marriage, Miss —— called. She was not admitted. Mrs. Robinson steadily and inexorably refused to know her or to notice her. She entreated, she wrote, she dogged his and her movements; but the little wife was a match for her, burnt her letters unopened, set her face like a flint, and never faltered in the vigilance of her guard, or in her determination that Miss —— should be to her a myth or a nullity. At last in 1821, Mr. Robinson, who was then Attorney-General, had a sudden call to England on business. Miss —— discovered that she had business also, and implored to be allowed to accompany them. She came to the house in person at the midnight preceding their departure, to entreat permission; it was inexorably refused,

but she vowed that she would come. Her brother, to whom, as to all her family, this strange infatuation (for otherwise she was of irreproachable character) was a great annoyance, was then appealed to. He said that as for reasoning with her, it was out of the question, but he would undertake to lock her up until they were off, and that for twenty-four hours at least she should not follow them.

It was in the winter, and they started with good sleighing by land. At Coburg (Lower Ontario), however, Mrs. Robinson was so ill that they were obliged to stop, and on the second morning who should drive up but Miss —, in a hired sleigh and without any companion.

From that time she followed them to New York, stopped where they stopped, always, if possible, secured the room next to or opposite them, and haunted them day and night. She was always trying to caress the baby (Emily), but the nurse, "old Aby," had the strictest orders never to leave it with her. At New York she found out the vessel they were going in, and engaged a passage in it. Learning this, Mr. Robinson went to the captain, and said that for various reasons Mrs. Robinson could not go in the same ship with that lady, and that he should have to take another. Alarmed at the prospect of losing a large party, the captain begged him not to alter his arrangements, and undertook that Miss — should not have a passage in his ship. This pledge he kept, and she was obliged to engage one in another vessel, the *Albion*, sailing at the same time. They started, not without much alarm that Miss — was concealed somewhere on board, and would reveal herself some day; but they were never to see her again. The *Albion* was wrecked on the coast of Ireland; only one passenger and two seamen were saved. And poor Miss —, brave, energetic, and determined to the last, sustaining, as they said, the courage of all on board, found rest at last in a watery grave.

Mrs. Robinson told the story as if she had scarcely forgiven her, and E. thinks it served her right.

One of my friends at this time was an old Mr. Tucker, a gentleman in business of some sort, and much looked up to for his integrity and high principles.

He is greatly against the system of temperance pledges. It is putting part of Christianity for the whole of it; is sustained by human opinion only; offers a fearful snare to those who are unable to keep them, tending to drive them to despair; is opposed to a due acceptance of the bountiful gifts of God. This remark of his may

be widely applied. There is a wonderful power in a badge of distinction, in a social or party pledge of any kind, implicit or explicit. Proclaim any principle which shall entitle those who hold it to consider themselves better than the best of mankind, and you will have a host of followers, because the love of self-righteousness is so common. The secret of much sectarian success is in this. "I study," he said, "to keep my principles rather in arrear of my practice, than the contrary."

He does not think the specific objections to balls tenable, and permits his daughters to go to them, but he has the utmost objection to fancy bazaars, and will not allow them even to work for them. He is quite of Kempthorne's opinion about society. He thinks a want of scruple as to the means employed to effect good ends one of the prevailing evils of the day. I copy these opinions of a wise, good man, though there is nothing very original about them, because they helped my own emancipation from the narrow views I formerly held.

On 12th May I left Toronto with a large party, to assist at the wedding of Lukin Robinson and Elizabeth Arnold at Woodstock, a place about fifty miles west of Hamilton. We were a very gay and happy party, all in holiday mood. The event took place on Thursday, 15th, but we remained until the Monday following, enjoying picnics, drives, and dances got up by the neighbourhood. Why should I hesitate to say that I was falling more in love all the time? One of our drives was to Eastwood, a place which had belonged to a late Admiral Vansittart, whose widow still resided there. He had about 1,500 acres on the spot, 6,000 acres at Boxley, and more elsewhere, and was said to have sunk a fortune of £30,000 to £40,000, which the estate never made good. The house, however, was quite exceptional in Canada, far in advance of the day. I particularly remember the large collection of family miniatures. The admiral had been famous for an old-fashioned courtesy and extreme consideration for others, of which his last moments afforded a remarkable trait. "Doctor," he said faintly to Surgeon Holmes of the Royals, who came over from London, C. W., to attend him, "I am quite sorry to detain you so long. I had no idea I should live so long as this. You will have a bad drive home."

The spring of 1846 was made memorable by my happy engagement to the eldest of Chief Justice Robinson's daughters.

Whether it was a little before or a little later that George Allan, now speaker of the Canadian Senate, engaged himself to Louisa Robinson I cannot be sure; Augusta had married James Strachan

twelve months previously. The brightness of Bromley House at this happy season of youth and joy cannot be depicted. There are four grey-headed survivors of that happy band, and time has been very kind to us all, but he can never bring back the hour of "beauty in the bud and fragrance in the flower."

About March in this year I got involved in a very painful business. My eyes were opened to the infamous life led by the wife of my soldier servant, to the habitual drunkenness of both of them, and to the disgraceful condition in which they lived in an old blockhouse in Spadina Avenue. I could not plead entire ignorance; instances of misconduct had been brought to my notice, but I had never properly investigated them. The blockhouse, though not far off, was quite out of my line. Ultimately the woman died of drink and destitution. The only child, a girl, whom I placed with respectable people and sent to school, followed her mother's vicious ways. The unhappy father, originally a steady man until his wife's misconduct drove him to drink, died also, I do not remember how, and I had the bitter reflection that timely severity and greater exertion on my part might have possibly saved the whole family. I record this painful experience for the lesson it gives of the consequences of evading responsibility and indulging a good nature, which is nothing but sloth. I ought to have sent him back to his military duty at Kingston long before the thing came to a crisis.

There was at that time but one moderately good artist in Upper Canada, a Frenchman by birth, M. Berthon. We, that is Allan, James Strachan and I, conceived the idea of presenting Mrs. Robinson with the portraits of the three married daughters on the day when two of them were to leave their father's roof. Berthon was only too happy to lend himself to the plot, and we so contrived it that the necessary sittings were given the few weeks preceding our marriage without, as I believe, the faintest rumour reaching the parents that anything was going on.

George Allan and I were married together on the 16th April amid public rejoicings not very often elicited by merely domestic happiness, and it was not until her return to her drawing room that Mrs. Robinson saw the picture for the first time suspended there, and was affected to tears at the unexpected sight; the picture is still there. The best men on the reassembling of the party claimed and exercised their privilege of kissing the bridesmaids.

Both couples left for England in the afternoon—the Allans stopped at Clifton House, Niagara; my dear Emily and I continued our journey to Buffalo. By some mismanagement of the railway people

we did not get there until 2 A.M., and found the hotel closed, but the people were good natured and bestirred themselves to give us some supper.

We passed the Sunday at Auburn, and reached New York next day. It was at Buffalo that some rogue managed to steal one of my many boxes, and it happened to be one which contained the journal or log of my North-West journey, a loss I have never ceased to deplore.

Having a few days to spare before taking our "Cunarder" from Boston, we went to Washington, and by good fortune drove to the hotel at which a newly-arrived German minister was staying; we were awaked in the night by a most delightful serenade got up by his countrymen to welcome him.

An odd illustration of American manners was afforded one day. A shower came on suddenly as we were passing one of the "magnificent distances," for which Washington was celebrated in those days, when a gentleman darted across the road and insisted on being allowed to hold an umbrella over Emily as we made for our hotel. He was perfectly polite and unobtrusive, except in offering this unusual attention.

We sailed from Boston on the 1st of May in the s.s. *Caledonia*; our two fares were £62, and we arrived at Liverpool on the 13th, not then considered a long passage. I was left at the Custom House to clear the baggage, and honestly told the officers that certain new dresses of Emily's and Louisa's had not been worn. George on being informed was indignant, as they had been tried on; he hurried back to the Custom House and actually got the duty refunded. Although unable to avoid a certain amount of business on this my wedding tour, I did as little as I could.

To facilitate a re-comparison of the magnetic force at Woolwich and Toronto, the Sabines very kindly asked Emily and myself to pay them a visit. They were living on the Dover Road about a mile from Blackheath. She was busily engaged upon the translation of Humboldt's "Cosmos," then newly published, and he upon the voluminous notes which accompanied it. We all worked hard, but apart. They were a much earlier couple than we were. Mrs. Sabine was usually at her desk in an arbour in their garden soon after 6 A.M., and got two or three hours of work before breakfast. Humboldt was guided by Sabine entirely in his magnetical section, and Herschel revised, or at all events read, the proofs of the translation and notes. Sabine judiciously omitted passages relating to the Sunday cessation of work, of which the great German disapproved. He told me the East

India Company had already expended £36,000 on their observations, of which little or nothing ever came.

Government were at this time preparing to send a small body of troops to the Red River settlement, as a precaution against fillibustering invasions of our territory from the American side; and I was sent for by the Horse Guards to advise as to the arrangements to be adopted. I did not see the Duke of Wellington, but had a long interview with Lord Fitzroy Somerset and Sir Willoughby Gordon, Q.M.G.

The force was to consist of three companies of Infantry under, I think, Colonel Crofton, with a major and six captains, twelve subalterns, etc., 200 rounds of ammunition per man. It seems odd to me now that, besides 400 hammocks, 400 iron bedsteads and a full proportion of barrack furniture were to be forwarded, all *via* York Factory. Two Engineer officers, Captains Beattie and Moody, were sent up from Canada.

I must mention a striking trait of Lord Fitzroy Somerset's extreme courtesy and consideration for other people. I was asked on one occasion to meet Sir George Back at the Horse Guards. He was not there on my arrival, but we proceeded to business, and when it was over I sat on some little time expecting his arrival. At last I said, "I am afraid, my lord, Sir George Back cannot be coming; had I not better come again on some other day?"

"Oh!" he said, "Did you not know he could not be here to day? I thought you understood."

He had sat quietly conversing as if I were an ordinary visitor without betraying the least impatience.

Colonel Sabine was at this time very hot upon introducing magnetic registration by means of photography at Toronto, and wished me to take the opportunity of learning it of Mr. Charles Brooke, to whose house I went at some inconvenience several times. It was altogether premature; Brooke had not half mastered it himself, and seemed to have little idea of instruction. It was not for more than a year after this that they got it to work at Greenwich Observatory. I never actually saw a sheet of paper prepared or developed, and the consequence was that when the apparatus was sent out to me at Toronto, I had everything to learn. To make matters worse, there was a rival method by Mr. F. Ronalds, employing the Daguerrotype method, which Sabine must needs send out too; they made my life a burden for two years.

I remember, during this visit to London, dining one day with that eminent judge Sir Nicholas Tindal. He was long

remembered as the counsel who claimed, I think in 1817, under a statute not then repealed, *Wager of Battle* for his client, and so got him off.

A visit which gave us great pleasure was to Rook's Nest, near Reigate, a very fine place belonging to Mr. Ch. Hampton Turner. Mr. Turner's father was a wealthy Russian merchant, and contractor for the supply of hemp to the Royal Dockyards. At his death his widow had interest to get the contracts continued, and the family became very wealthy. The house was full of works of art, and among other things had a very famous cabinet of mineralogy, formed, I think, by the Abbé Haüy, one of the finest collections in the kingdom. It was afterwards purchased by Mr. Ludham, a London tradesman, and by him bequeathed to the Jermyn Street Museum.

Here I first met two valued friends, the gifted young architect Rhode Hawkins and his charming wife, and A. W. Franks, now the learned Keeper of Antiquities at the British Museum.

On the 21st August I visited Armagh, and paid a very interesting visit to Dr. Robinson, the distinguished astronomer, who was a great friend and supporter of Colonel Sabine. I need say nothing of the many refined and beautiful instruments he showed me, but I must record that he had become Colonel Sabine's supporter from a persuasion, founded upon careful investigation, that he had been very ill-used by Babbage and by Lord Beresford, then Master-General of the Ordnance. The latter immediately he became Master-General, which coincided with the publication of Babbage's book,¹ gave Sabine a peremptory order to join his company at Charlemont, and would not allow him a day's leave to reply. Sabine obeyed. Not long after, Lord Beresford visited the observatory with his brother the Primate. Dr. Robinson took the opportunity to tell him in plain and strong language the injustice of which he had been guilty, and assured him that he had not himself to thank that he had missed ruining an innocent man. Lord Beresford was thunderstruck, and to his great honour, rode off to Charlemont before the day was out, and made Sabine a handsome apology.

To return to Parson's Town. I had the pleasure of seeing the great telescope, and walking down the tube of it, but not of looking at any object in the heavens with it. I forget why; probably the night was cloudy. Lord Rosse himself was a very interesting person, and his account of the difficulties in training his workmen was most instructive. One odd circumstance I remember was, that he always

¹ On "The Decline of Science in England," 1830.

presented any man he took under instruction with a copy of "Sinty O'Gara," a humorous tale with a moral to it.

As the great telescope is now, I believe, equatorially mounted, and everything altered, I may as well transcribe some of my notes of the arrangements as they were.

The great tube seemed to rest upon the ground, between two massive stone walls, about fifty feet high and as far apart. Its form was barrel-shaped, with a cubical chamber about seven feet each way at the lower end, to contain the speculum, which, with the ingenious supports contrived for it, weighed six or seven tons, the tube perhaps fifteen tons. To prevent unequal strains and flexure of the metal of the speculum, it was necessary to give equal support behind to every part of it. This was effected by a system of tri-pointed props, each resting on a point of a larger tri-pointed prop, these on yet larger and so on, until three points alone sustained the whole, and themselves were carried by one centre.

The tube had a side motion of 5° to E. or W. of the meridian, and it indicated its passage of the meridian when swept in azimuth, by striking a bell. It was raised or lowered by chains worked by a capstan or windlass—and very easily—being carefully counterpoised.

At fifty feet distance from the great speculum was fixed, exactly in focus, a small speculum, on which the image reflected from the former was received, and examined by an eye-piece fixed in the tube on one side.

The perfection of form of the speculum was such that a power of 3,000 had been used, but there was perhaps not above one night in the year when the atmosphere would allow it. The contrast of colour in coloured stars came out much stronger than ordinary telescopes show it.

Whenever the six feet telescope was in use, another of three feet was also manned, as it commanded a much larger field—in fact, the whole circle.

Lord Rosse then considered the resolution of the great nebula in Orion his greatest achievement. He mentioned that it requires a concurrence of favourable conditions to resolve the closer objects of this class. The *Dumb-bell* was perhaps thirty times in his field, and sometimes entered as "suspected to be resolvable" before the favourable night came which allowed him actually to resolve it.

We went from Parson's Town by way of Limerick to Killarney, where some of the family were to meet us, and passed a few days at that lovely spot. Thence to Cork, where we took steamer to Bristol

on the 8th September, and so to Cheltenham to old Mr. Merry. He was then eighty-four, and had been Under or Deputy Secretary of War from 1809 to 1826, consequently through much of the Peninsular War and the Waterloo Campaign. He was possessed of all his faculties, and still devoted to his favourite pursuit of fishing.

The old proverb that "One good turn deserves another" was well exemplified when we took leave of Mr. Merry on the 21st, and went to Oxford, where my funds ran out. The bank, to my indignation, declined to cash a cheque, which, as I was a stranger, was quite natural, and it looked like being detained two or three days; but it so happened that a gentleman with whom we had made a slight acquaintance at Killarney, had been in the same hotel with us at Cork, and there discovered that he was in the same predicament. I had lent him some money, and he gave his address "A. S., near Oxford." I thought that if I could find him he would vouch at least for my respectability, so we drove over to S——, and were so fortunate as to find him at home. Thus ended our difficulty. He was living with his father, a very eccentric old man. We stayed to luncheon, and the first object on entering the dining-room was a large fancy portrait of the devil! There were numerous other objects no less bizarre, and mostly with some reference to the realm of darkness, yet his conversation was rational. I think he gave some queer explanation, but have forgotten what it was.

We went on to London the same day, as I had an appointment with Sabine and Mr. Brooke, but there was one ludicrous adventure I must not forget. My two cousins, Thomas E. P. Lefroy and Jemina Lefroy, were married on the 9th, and, unknown to me, had gone to Itchel for their honeymoon. I do not know which was most surprised when I burst in upon them at a late hour of the 12th, having myself determined to take Itchel on my way to London. I slept at the house, but disappeared before breakfast.

We took passage from Liverpool in a sailing vessel on the 10th October, and landed in New York on the 14th November. Our selection of a sailing vessel was not dictated by economy, though it saved £20. Every berth in the steamer was engaged. A short time previously a very sensational shipwreck had occurred in Dundrum Bay, near Dundalk (that of the s.s. *Great Britain*), and her passengers were returning to America. We had some of them in our vessel.

On the 21st November we found ourselves once more happily under the roof of Beverley House, and there we remained as visitors until the observatory cottage was ready for our reception. This

was not before February 18th, 1847, and three days later Harry was born.

The cottage was of very slight construction, and difficult to warm. I have often seen the water on the wash-handstand in our bedroom frozen solid; that in the water-bottles, having an open neck to expand into, would sometimes overflow in ice round the neck without bursting them.

CHAPTER VIII.

My life in 1847-8 was laborious and uneventful. I was engaged in the very difficult task of endeavouring to reduce the registration of magnetical phenomena by photography to a practical certainty, in addition, of course, to carrying on the current work of the observatory; and it really was too much for me. It was pure excess of zeal, for I was often called by the N.C. officer on duty between 12 and 1 A.M., and repaired to the observatory until 4 A.M. If I had worked less with my hands, and more with my head, it would have been much better, but I was by temperament more of an actor than a thinker.

I should have mentioned that on my return to Canada, Lieut. Younghusband went home to be Colonel Sabine's assistant, *vice* Riddell, who resigned that office. I was therefore without educated assistance, or a second mind to take counsel with.

The year following the Irish famine was long remembered in Canada for the hordes of famine-stricken emigrants sent out, and the typhus fever that followed their footsteps. Among the victims of the latter was my friend, Dr. George Grassett, a brother of the then Rector of Toronto. Few men fell so much respected or so generally lamented. From a letter written to my sister Sophia in July, 1847, I copy the following passage:—

“What provokes everybody is, that these Irish, whose filth brings pestilence, and whose beggary burdens the country, conceal among their rags, in numberless instances, large sums of money. They will die in the streets with this money on their persons; many have done so. Some of the anecdotes which have gone round the papers are scarcely credible. Can there be a better illustration of the wretched demoralization of the race. They rob landlords, murder agents, live in starvation and beggary, and rather die in it than spend a farthing of the money so scraped together while a possibility exists of carrying on the cheat. They don't do so much immediate good in available labour as was expected. They stand out for impossible wages.”

J. R. was married to M. J. H. on 30th June, and an absurd

h. - son J (?)

incident attended the wedding. George Allan and I accompanied him to church, and on the way I casually remarked, "Got your licence all right, John?" "Licence," said he, "what do I want a licence for? A man doesn't want a licence to be married!" "Doesn't he?" we exclaimed, "You are much mistaken." With difficulty we persuaded him to drive off straight to the registrar. Luckily, we found that official, and he had one licence left!

We drove back in all speed, and were just in time. Meanwhile the bride and her maidens, with all the friends assembled, were in an agony of suspense, the former almost in tears. I suppose we kept them over half an hour.

My dear friend Augustus Frazer died in 1848 (July 11th) at Suedia, in Syria, of cholera. He left me his residuary legatee, and I ultimately received between £3,000 and £4,000.

In March, 1848, I accompanied the Chief Justice and Mrs. Robinson on a long-promised visit to Colonel Talbot, a personage whose name will long live in Canadian history and romance.

Colonel Talbot was born in 1771, and first came out to Canada in 1790. He returned to the colony ten years later with the rank of Lieut.-Colonel, on the personal staff of Lord Dorchester; and a year or two later, from some motive which has never been disclosed, but was believed to have been disappointed affection, he retired from the service, and devoted himself to the task of settling the country. He became the pioneer of the Far West. The Government granted him two newly laid-out townships on Lake Erie, Dunwick and Aldborough, upon the terms that he was to put a settler upon every 200-acre lot, with a free grant of 50 acres, the remaining 150 acres being his own fee. He stipulated that nobody should interfere with him, and no other grants be made out of his townships. The fertility of the soil, the beauty of the country and climate, and the admirable regulations which he made and enforced as to road-making, speedily made these townships celebrated, and Government subsequently granted him another as a recognition of his services. He took, in fact, a leading part in settling several townships without reward (a township is about 60,000 acres), except a pension of £400 a year, which was ultimately granted him. Down to the time of this visit he had never alienated any of his own land, but had just then brought about 20,000 acres into the market, which was in general demand at prices ranging from \$6 to \$12 per acre.

Colonel Talbot received us with great cordiality, and led us through a room crowded with flour-barrels, firewood, and similar stores, into his habitual sitting-room, which, setting aside the

absence of cooking implements, was very much like the kitchen of a small farmer's house. It measured about fifteen by twenty feet, with only one small window looking out through a rough and dilapidated verandah on to Lake Erie.

An enormous rough red-brick chimney, made to receive four-foot logs uncut, occupied much of the space; opposite to this, and before this huge fire, was his seat. The floor of the room was sunken, warped, uneven, but it had a floor, and it was clean. A large table, covered with a ragged old green cloth, occupied the centre; another table stood in one corner covered with a litter of old newspapers. The rest of the furniture consisted of an old bookcase, very much out of the perpendicular; a substantial cupboard and a third table completed the furniture, all in plain pine, and grey with age. I must mention an immense box and a barrel filled with choice fruit trees from some nursery in England.

I have described the drawing-room thus minutely, because its appearance bespoke at once the character and habits of the singular man who occupied it. On this occasion it had a civilized look, because two very pretty and ladylike girls, Amelia and Eliza Harris, had been asked to meet Mrs. Robinson. They were two of four sisters who were the belles of London, Canada West, and very famous in their day. Their father was a retired master R.N. They all married well. Colonel Talbot was a short, strongly-built man of seventy-seven, stooping a good deal. He wore a coarse home-made suit of country cloth, of an alternate black and red stripe. The coat resembled a shooting coat more nearly than any other known garment, but it had rusty velvet loops or shoulder-knots, hanging from a strap across each shoulder, something like a French-Canadian *capote*. His features were very like those of William IV. He formerly drank hard, and showed traces of this indulgence. His memory was very tenacious and accurate, his hearing but slightly impaired, and his general vigour remarkable, though he complained of the long winters. Although he could be polished when he pleased, it suited his humour in general to be rough-spoken; and having plenty of Irish humour, he often turned the laugh against people who, he fancied, were giving themselves airs. He was never known to show the least religious feeling, or to give an acre for the support of a church or mission; but one redeeming point was his love for children and kindness to young people. At the time of our visit he allowed himself to be governed by a young man named George Macbeth, who was his servant.

Colonel Talbot entertained us very plainly but substantially. It

was remarkable to see the clearness and force of the old man's recollections, as well as the vigour of his animosities and prejudices. There seemed to be no dispute of the many he had had with the Government, Home or Provincial, which he was not ready to take up and as eager to carry on, as if his land still depended on it; he had often great difficulties, occasioned partly by his own rapacity, partly by fluctuations of the political barometer; but his great influence at home and personal intimacy with members of Government always carried him through.

Colonel Talbot's original intention was to have made his nephew J—— his heir. The young man came to reside with him, but they could not live together. He drank hard and wanted J—— to do the same. They parted. Then Talbot induced Colonel ——, the elder brother, to throw up a staff appointment at the Horse Guards and come out. Being wise in his generation, Colonel —— secured good terms for himself first, and then did so; and he was the first person we met on entering Talbot's demesne, driving a lumber waggon. I met him in Toronto the following year, when Talbot had taken it into his head to go to England. The sequel of his story is worth narrating.

He was made a lion of in London, and wherever he went Macbeth accompanied him on a footing of social equality. No sooner was he safe across the Atlantic than Colonel —— began to treat his property as if it were his own. Nobody ever expected to see the old man back. He did, however, return, to be made miserable by the changes he saw. Of course a violent quarrel ensued, and he worried himself into an illness that nearly proved fatal. He did survive, however, and took it into his head to go to England again, and gained strength enough to carry out his intention.

Not long after his departure Colonel —— also returned to England, to take up an appointment at the Horse Guards; but before doing so, without consulting his uncle, he let Port Talbot for a term of years, and when the old man came back to Canada the following year, it was to find his place irretrievably passed out of his hands, and half his property gone to enrich a man he hated.

There is a tragic completeness about the whole transaction which makes it more interesting than any romance. He died in February, 1853.

On June 3rd, my dear wife gave birth to a daughter. . . .

I was elected a Fellow of the Royal Society on the 9th of June.

About this time the famous dwarf Tom Thumb came to Toronto, and I engaged him for a garden party. He was simply turned loose

on the lawn with a number of children to play with him, and nothing could be prettier or more natural than his enjoyment. He was said to be about sixteen years old, but was much younger in mental development. His height was twenty-eight inches, rather less than Harry's, an infant of sixteen months. He sang a negro song, danced, played hide-and-seek, and pleased everybody. His attendant said that he had the full intelligence of a normal lad, a good memory and quick comprehension. He had a healthy look, rather a good countenance, and appeared quite happy. He seemed to like being exhibited and made much of.

The years 1849 and 1850 were not marked by anything to remember except the birth of my third child in June, 1850, baptized Alice Maude, and taken from us in infancy.

In November, 1850, my health failed so much from overwork and worry that I applied for a Medical Board. I found a young officer in the command, Lieutenant, now Major-General W. Goodenough, C.B., who with a little instruction was competent to carry on the routine work of the observatory, with already trained assistants; and after initiating him into it, I sailed from New York on the 16th in the sailing packet *Yorkshire*, and reached London on the 11th December.

I have, however, forgotten to mention a very delightful little tour that I made in June, 1849, with my friend W. J. Smythe, R.A. We left Toronto on June 1st, and got back on the 20th, having gone by way of Cincinnati and Louisville to the Mammoth Caves of Kentucky, observing at several stations (see "Diary of Magnetic Survey," p. 54). I wrote an account of the caves, which was printed in "Fraser's Magazine" for 1850. The whole tour only cost me \$84.

The Mammoth Caves were not easily accessible in 1849, but there was an excellent hotel there. We travelled in Kentucky by stage-coach, and as it was my first visit to a slave State, I was much interested in everything. We were the first persons I believe to make any kind of survey of those strange labyrinthine caverns, with the general result that their real extent was somewhat less than half what was reported. For example, the distance from the entrance to a vast vault called "The Chief City," which covered an acre of ground, proved on measurement to be $1\frac{1}{2}$ miles; the guide called it $3\frac{1}{2}$ miles; but a measured mile of pitch darkness in a succession of passages and chambers seems a great deal more.

A painful incident occurred at Toronto on Christmas Eve, 1849. People were very fond of shooting at turkeys with rifles on that day.

A party were so engaged on the Peninsula, now the island opposite the city, and a little boy was looking on greatly interested. Nobody minded him much, but as the party broke up to return across the ice homewards they perceived that he remained still as the stone or stump he was leaning against without offering to stir. One of the men went up to him, and found him frozen to death, his eyes open, his attitude as if he were still looking at the shooters. It was not a particularly cold day ; the thermometer was well above zero Fahr.

The following stanzas, written at this time in his sister's note-book, are worth introducing. To what circumstance they refer has been forgotten :—

A DIRGE.

(Written at daybreak, 11th December, 1850.)

Pass away ! Pass away !
 For the wings of night are shrinking,
 And the watch-fires of the sky
 One by one are sinking
 At the matin herald's cry.
 Thou, too, for rest art aching ;
 Why delay ?
 Go where the dawn is breaking—
 Pass away !

2.

Pass away ! Pass away !
 Yet not as one that leaveth
 Aught too dear below.
 When the work is ended grieveth
 The labourer to go ?
 And thou hast laboured truly
 Through the day ;
 Hence for thy wages duly
 Pass away !

3.

Pass away ! Pass away !
 To Him whose blood hath bought thee,
 Who hath robbed this hour of fear,
 To Him whose love hath taught thee
 To be so loving here.
 Where the bridal train attend thee,
 And the clay,
 Shall never more offend thee,
 Pass away !

4.

Pass away ! Pass away !
 For we hear amid the swelling
 Of the requiem that we sing,
 Soft whispers round thee dwelling
 And the angels gathering—
 'Tis for thee they gather,
 That array,
 Farewell, but not for ever,
 Pass away !

During the rest of my stay in England I was moving backwards and forwards a great deal to Kew or Richmond and Woolwich, with an eye to business.

At this time the approaching "World's Fair," the great exhibition of 1851, was the theme of endless speculations and rumours, and the building itself was nearly completed before I left town. I was extremely anxious to be allowed to see the inside, but Sir William Reid declared that he had been obliged to refuse a royal duke, and that it was impossible! However, the kindly old man added, "I generally walk through the building on my way home when the office closes, and if you happened to call upon me about five o'clock, why I might take you with me!" Accordingly I casually did call at that hour, and had the great pleasure of seeing the wonderful structure, with a large part of its contents. The lofty transepts, rising clear over two tall elms (one of which still survives), struck me more than anything else. There never has been, nor ever can be again, an exhibition of such interest. The grandeur, the beauty, the surprise and novelty of it, the pomp of ceremonial, the youth of the Queen and her husband—all were elements in its success which can never meet again.

CHAPTER IX.

I LEFT England in the *Canada* March 15th, and reached Boston March 29th. I had the unspeakable happiness of being welcomed home by my dear wife on the 2nd April, and of finding her and the children well.

I had time in Boston to visit my friends at Harvard University, and dined with Guyot, where I met B. Pierce, Lovering, Agassiz, Fulton, and some of the undergraduates. The dinner was an early one, on continental lines, and most agreeable. Next day I dined with W. C. Bond, the astronomer, and met other scientific men. Professor Lovering was "Dean" of the professorial body when I again visited Harvard in 1877, and, with the exception of Dr. Gould, is the only one of the party living. My own regret to have never been at a University, and my desire that as many as possible of my grandsons should have that advantage, has been greatly confirmed by the pleasure it gave me to have occasional opportunities from 1842 to 1877 of renewing intercourse with American scientific men, almost all connected with Harvard, from Benjamin Pierce to Asa Gray.

In August I attended a meeting of the American Association for the Advancement of Science at Albany, N. Y., and was the guest of a Mr. Mead, a leading lawyer, in company with Bache, Joseph Heney, J. Hall, the State geologist, and the Governor of the State for the time being. Here again was a very delightful approach to the most intellectual American society, which I greatly enjoyed. I read a short paper on "The Irregular Fluctuations of the Magnetical Elements," which is in part reprinted in my "Diary."

In June I had the pleasure of receiving a visit from my friend, Captain Baird Smith, of the Bengal Engineers, already one of the most rising officers of that corps, but destined to attain much higher distinction in the Indian Mutiny. He also had been well introduced at Harvard, where his brilliant talents and conversation attracted much notice. He came to study the great canals of Canada and the United States.

But this year was chiefly marked by the first great affliction that had befallen my married life, viz., the loss of our beloved third child,

Alice Maude—born 27th June, 1850—who was taken from us on the 1st December. Of this sweet child it is no parental partiality to say that her brief stay among us was like a visit from a being of another sphere: so obedient, so loving, so full of innocent playfulness was she, that many a time I felt she was too great a blessing for one so unworthy. She won all hearts beyond the common gift of children—not by beauty, for except in sweet innocence of expression she had less outward beauty than Emmie, but in faultlessness. We laid her in Lukin Robinson's vault in the new cemetery, beside a child he had lost not long before.

I must here relate a curious psychological story. It was related to me by Mr. William Cayley, and having a slight acquaintance with Dr. Morgan Hamilton, I wrote to him inquiring if it were true. The following was his reply:—

January 18th, 1853.

CAPTAIN LEFROY, R.A.

“ . . . On the morning of the 15th September last, I received a note from my sister-in-law urging me to lose no time in seeing her father (Captain Browne, of Goderich), who was very ill. I immediately left town, and on my arrival at Goderich found him in great pain, his mind perfectly clear. I left his room to prepare some medicine; my sister-in-law followed me, and remarked that he had been wandering during the night, as he insisted on repeating that the Duke of Wellington was dead, and that there was great work in England in consequence of his sudden death¹; that the Duke, Bonaparte, Mehemet Ali, and George Browne were born on the same day, and that he was the last of the four.

“On the 16th he was much relieved, and able to leave his room for the parlour, and while in jocose conversation with him, I made the remark that Isabella was greatly alarmed at his having killed the Duke of Wellington the night before, and fancied that he was wandering. He said his mind was never clearer. On the 17th September his case assumed a rapidly hopeless character; he became insensible towards night, and continued in that state until his death at 10 A.M. of the following morning. Two gentlemen called just before he died, and I mentioned to them what had occurred. I was constantly asked by persons the truth of the foregoing facts many days before the melancholy tidings of the Duke's death could have reached America.

“I remain, etc.,

“(Signed) MORGAN HAMILTON.”

¹ The Duke died 14th September, and Miss Browne wrote on the same day.

There cannot be a better authenticated story of the kind than this ; but when examined there is nothing mysterious about it. That two old men of eighty-three should both die in the same year is not remarkable ; that the old soldier's thoughts should run on his great commander is easily conceivable. Granting so much, the chances are only 364 to 1 against its happening on the very day the Duke died. Long odds indeed in a bet, but realized every day in the accidents of life.

As it had been settled in 1850 that the Toronto Observatory should be handed over to the Provincial Government on the 31st March, 1853, and the instruments sent home, I was now busily engaged with the necessary preparations ; but the Canadian Institute in February memorialized the Government to have the instruments left, which was agreed to. The Provincial Government paid £428 for them. They purchased at fair prices a number of my books, and compensated me liberally for the addition I had made to the cottage.

On the 2nd March I was gratified by an unlooked for request to allow my portrait to be painted by Berthon for the Institute, of which I had been President for three or four years ; and on the 2nd April, the same body gave a conversazione, at which I was presented with a silver vase and a salver.

I had the qualified pleasure of showing the portrait in 1884 to my dear wife : qualified, because it is a very indifferent work of art, and the lapse of thirty-one years had obliterated nearly every trace of likeness.

It is needless to say that at the time all these kindly proceedings gave a pleasure, in no degree qualified, to my dear Emily and her family. It was arranged that she and the children should remain at Toronto for a time, while I settled myself in England.

I left Toronto on the 11th and Boston on the 13th April. We touched at Halifax, where I made acquaintance with the lovely *Epigaea repens*, the fragrant white flower which pushes above the snow with the earliest spring.

We reached Liverpool on the 24th or 25th of April, and I reported myself at Woolwich on the 27th.

CHAPTER X.

My Company was "in battery," *i.e.*, for the time under instruction in field artillery, the system at that time. I took command of it at once. It was all rather strange to me, as I had been nearly fourteen years away, but I took up the threads of regimental duty quickly enough. I find entries in my diary :

May 6th.—First day's drill under Sergeant-Major.

12th.—Garrison court martial.

16th.—On guard.

19th.—Out in brigade for the first time.

30th.—Drilled the battery myself.

And so on.

At this time we were drifting with portentous rapidity into a war with Russia. The *coup d'état* of 2nd December had made it a part of Louis Napoleon's policy to force on a war, and the British ministry were committed to him. They thought it prudent to order a camp of instruction on a considerable scale to be formed at Chobham, and my battery was one of those ordered there. I took over a new equipment on the 8th June, and so hurried were the preparations and so unready the departments, that I well remember that as one of the batteries was drawn up from the Arsenal to the Park, the painters walked alongside, painting away as it went along.

On the 12th June I began my march ; it was a pouring wet day. We started at 8.30, and reached Putney, where we were billeted, soon after 1 P.M. Our orders were to reach Chobham Common at noon the next day. Accordingly the bugles sounded at 1 A.M. ; few of the men or officers having been in bed, many of the former were consequently drunk. The billets were all on public-houses scattered over many miles of road, but we got off, still in pouring rain, by 3 A.M., and were punctual to time. It must have been a pretty sight. The weather had cleared up, and precisely at noon every road and approach to the Common were alive with troops advancing upon it, regimental bands playing, all fatigue forgotten, the whole country lining the hedges.

The camp was under the command of General Lord Seaton, than

which there could not have been a better selection, if he had been twenty years younger. As it turned out, there was scarcely any instruction. It was a great military pic-nic, varied by numerous reviews, the effect of which is the reverse of instruction. I remember the Guards on one occasion, in their pipe-clayed trousers, advancing in line, come upon a small piece of water, larger than an ordinary pond; they valiantly walked through it without breaking off companies, and Kinglake gives them great credit for doing something of the kind in crossing the Alma. I thought it folly.

The whole thing was as different from the celebrated camp of instruction near Harwich, under Sir John Moore, formed before the Corunna campaign, as could well be.

The Queen received us on the 21st June, our orders (the Artillery) being to fire the salute long before her approach. On the 25th there was another field-day. This was the first occasion on which Prince Albert commanded the Guards.

On the 11th July we had a small review for the amusement of the Royal children, and Lord Seaton very kindly attached me to them as a kind of orderly officer, to attend them round the camp. Lieut. G. Le Marchant Tupper, at present Commandant at Woolwich, who was a rapid draughtsman, also accompanied them, to make sketches for them. The first was a Highlander on sentry, of whom he made a spirited drawing, and galloping after the carriage, was able to put it into the Prince of Wales' hands as he drove away. Our duty was to escort the carriage as outriders, as far as one of the gates of Windsor Park, and hard work I found it to keep up, upon a battery horse, by no means in the high condition of the royal posters.

We were very lavish of blank cartridge upon all these occasions. I find that on July 9th my battery expended 150 rounds, portfires $13\frac{1}{2}$; and on July 12th, 228 rounds, portfires $15\frac{1}{2}$, and four pounds of slow match. Neither portfires nor slow match are now known to the service, but our guns were then fitted also with flint locks!—or rather they were carried ready for use, if portfires ran short.

On 14th July I left the camp at 7.20 A.M. for Woolwich, again in pouring rain. Our first day's march was to Kingston, 1.20 P.M.; next day to Woolwich, 1.30 P.M. We were met by Sir Hew Ross and the garrison staff, who inquired with some anxiety where the captain was? The fact was that, not expecting to meet anybody, I was riding a leader in one of the trains. I wanted to see what a driver's duty was like.

On the 20th July we were inspected by the Commandant, General

Whinyates, to whom I have always felt much indebted for getting me out of a scrape. On the second day of our march one of the men was very drunk and sulky; he would not march, he would not carry his knapsack, he was as mutinous as a prisoner could be. Losing all patience, I gripped him by the collar, spurred my horse, and dragged him on a few yards. For this he vowed to make a solemn complaint at inspection, of which the Commandant was informed. General Whinyates finished his inspection; then we formed square, and he demanded in a loud voice, "Any complaints?" No answer! Turning his horse to face the "aggrieved parishioner" he again inquired, "Any complaints?" in a tone not inviting them. Still no answer!—so he touched his hat to me and rode out of the square. I heard no more about it.

The 8th of August was rather a memorable day, for on it I took my wife to Chobham to lunch with Lady Seaton, and an opportunity was afforded me of speaking to Lord Seaton on the subject of some more adequate recognition of the eminent services of Chief Justice Robinson than his Companionship of the Bath. Lord Seaton was thoroughly acquainted with them from his own services in Canada, and promised to write to the Duke of Newcastle, then Secretary of State. This was the beginning of a correspondence which led to his being created a Baronet in the following June.

We did not get into our house on Woolwich Common until the 17th September; and about a month later I was offered and accepted the post of secretary to the Royal Artillery Institution, my own child, but which owed its then prosperous condition almost entirely to Frederick Eardley-Wilmot and his influence with Mr. Monsell, the Clerk of the Ordnance, now Lord Emly. I continued to command my battery and to do garrison duty.

This was the first year that batteries were allowed to drill on Plumstead Common. On December 10th my company was dismissed battery, after which I find no record of regimental duty, and I imagine that I was relieved of it to give my whole time to the Royal Artillery Institution.

War, although not actually declared before the 28th of March, had been in view for many months, and as early as 13th of February a small private meeting was held at my office to consider the compilation of a handbook of Field Artillery for use of officers. The old "Pocket Gunner" was entirely out of date. Griffith's manual, though a very meritorious book, was not what the service required. The conference ended in a decision to compile such a work, and the general editing of it was left to me. I got a revise of the first 128

pages on the 8th of June, and twenty-five copies on the 30th. We sent out 300 copies by the *Jason* on 27th of July. It was adopted as a publication of the Institution on the 23rd of May.

Writing in Cornwall (in 1888) with a very small part of my MSS. at hand, I cannot enter into the details of this intensely exciting time as fully as I should wish. I was three or four times called upon to compile papers for Mr. Monsell; one of these was a sketch of the history of British Field Artillery since the close of the Peninsular War. I was in some degree competent to do this, having printed the three secret reports of the Committee of Revision of 1819¹ (with permission), but it was exceedingly irregular of Mr. Monsell to come to me for it. As it was I took the MSS. when finished to Sir Hew Ross, and said frankly that I had not felt at liberty to decline Mr. Monsell's request, but I did not want to get into back-stairs relations, and begged to place it in his hands to forward if he thought fit. Sir Hew was pleased; he glanced at the paper, said he did not desire to have anything to do with it; I was at perfect liberty to send it on my own responsibility. I attributed afterwards much of the friendly feeling Sir Hew manifested towards me to my having acted in this open way.

But Mr. Monsell was not the only instance I have known of civilian statesmen arming themselves with information from subordinate and irresponsible sources, instead of calling for it in an open manner from the responsible source, or official authority concerned. At this time the heads of departments in the Ordnance were chiefly old men, with stereotyped ideas, very slow to move, and averse to change. Monsell found younger men, such as Wilmot, Dixon, Boxer, and I may say, myself, more energetic; but then he should have fairly told the old gentlemen that he was in communication with others besides themselves.

I took the family to Hastings in July. It was on the 21st of July that the general memorandum respecting beards and moustaches came out. Not, if I remember right, the one permitting them to be worn, but one restricting their wild luxuriance.

On the 8th October I was agreeably surprised at receiving a visit from Colonel Palliser, the Assistant Adjutant-General, offering me the appointment of honorary secretary to the Royal Commission about to be issued for raising a Patriotic Fund; an immediate decision was required, and I gladly accepted it the same day. This brought me into connection with the Duke of Newcastle and other

members of the Government, including H.R.H. Prince Albert, the first chairman. My colleague was Captain E. Gardiner Fishbourne, R.N., with whom I was destined ultimately to have many hard rubs, but we got on very well at first.

The work began on the 13th October. We had much to do. An office was to be opened ; the Treasury appointed an accountant, we appointed a clerical staff. The publication of the "Alma Gazette" on the 8th October had given an immense stimulus to public sympathy ; for the first time the names of private soldiers killed and wounded were given. We had meetings to organize, advertisements to put forth, authorities to wait upon, money to receive ; a very large correspondence, especially with Colonial committees. The Royal Commissioners met for some time once a week, and there were rival organizations of charity, which, until the Patriotic Fund got far beyond all competition, caused us a great deal of trouble by newspaper criticism.

The fund increased by leaps and bounds. The Duke of Newcastle when we began, said on one occasion that he should be very pleased if the fund reached £100,000. It ultimately exceeded £1,600,000 ; but no one was prepared for the generous enthusiasm, not of the country only, but of the English race throughout the globe. We received £95,000 in less than six weeks.

On the 14th November occurred the fearful "Balaclava gale," which by sending the store-ship *Prince* to the bottom, was the chief cause of the calamities of the army in the winter of 1854-5 ; forty-seven other vessels were also wrecked, and more than one thousand lives lost, chiefly of sailors. The Patriotic Fund Commission was so stringently worded that serious doubts were entertained whether any of the money raised under it could be legally applied to the relief of widows of men not in the Queen's service. Ultimately it was given in their favour.

Lord St. Leonards was the great stickler for the letter of the Commission. There would have been much less waste of the fund, and moral claims would have been better satisfied, if a wider discretion had been left. We often gave annuities for life, where justice would have been satisfied by a donation, and sometimes refused any relief where we would gladly have given a donation if we could.

On the 30th November I had an interview with the Duke of Newcastle at the War Office. His Grace sent for me to explain his views as to the employment of an officer of Artillery in his department, and to offer me the post.

He said that the organization, just then sanctioned by the Treasury,¹ included three clerks of the first class. He could make me one of them. He could not confer any military title, the Department being wholly civil; but he assured me that he should not regard me, and I need not consider myself, as a clerk in any other sense than filling the place of one for financial convenience. He anticipated having many military inventions and other technical subjects referred to him, and wanted a scientific officer to advise upon them. The salary was £600 a year, increasing by £25 annually.

I joyfully accepted. Apart from any question of my personal fitness or unfitness, I have always contended that the Duke could not have made a better arrangement at that time. I hardly anticipated the jealousy shown by the old officers of Artillery, my seniors, for I was still only a captain; but it did not trouble me much. The Board of Ordnance still existed. The Secretary of State for War was superior to it, and to give him needful independence it was absolutely necessary that he should have a referee of his own upon technical questions, on which it was not to be expected or desired that he or his civil staff should act without professional advice. He officially designated me his "scientific adviser on subjects of Artillery and inventions" (see Duke of Newcastle's evidence before the Sebastopol Committee, vol. iii., p. 376), and in the distribution of business in the War Office all such questions were marked direct to me. A little later I had the foreign legions, with all their curious and often interesting correspondence.

As everything was pressing, I entered on my duties on the 1st December, a little in advance of the formal organization of the office; and as this step had a most important bearing on my subsequent military career, and, as things turned out, cut me off from active service both in the Crimean War and the Indian Mutiny, I will here record exactly how it happened.

On the 1st December, 1854, my company, No. 7, IV. Battalion, was the twenty-third for foreign service.

There were already twenty-two companies or batteries of Artillery in the Crimea or Turkey, and no one anticipated the long siege and the unexampled development of the artillery attack which followed. I was seconded on 26th January, 1855, and Captain Stapylton

¹ Before this the offices of Secretary of State for the Colonies and for War were united. There were but three Secretaries of State. The Duke was the first Secretary of State for War. The Secretary at War was a minor financial officer, not in the Cabinet.

Robinson promoted to my company, with which I ceased to have any personal connection. It was not actually ordered on foreign service until June, 1855.¹

The first vacancy that occurred in the rank of first captain after my late company was put under orders, and to which I should have fallen had I offered my services, was Major Faddy's, at the Cape of Good Hope.

I might, of course, at any time have thrown over the Duke of Newcastle, resigned my civil employment, and taken my chance. I did not think this my duty. I was twenty-ninth from promotion when seconded. It was very far from my original intention to place myself in such a position, as my letter to Sir Hew Ross, asking permission to accept the Duke's offer, shows:—

“WOOLWICH,

“*November 30th, 1854.*

“SIR,—I am authorised by the Duke of Newcastle to state to you that His Grace has done me the honour of offering me the charge of a Department about to be constituted in the War Office, to which he proposes to refer a class of duties which he considers may be more advantageously superintended by a military than by a civil officer. The Duke of Newcastle has kindly given me the choice of at once accepting the appointment for a permanence, or of entering it upon the footing of an officer holding temporary civil employment. It is my wish to adopt the latter course.

“Under these circumstances, I have the honour to request that you will submit to the Master-General my application for his permission to avail myself of His Grace's offer, and that I may be relieved from regimental duties for the purpose for as long a period as the regulations permit.

(Signed) “J. H. LEFROY.

“The Deputy Adjutant-General.”

I served in the War Department under nine Secretaries of State, but with none of them was the position more agreeable than with the Duke of Newcastle. He paid me the compliment on one occasion of saying that I was the last man to leave the office except himself; which may have been true, for I never left while there was work to do, and utterly disregarded “office hours.” Both he and his private secretary, H. Roberts, afterwards Under-Secretary of

¹ It landed in the Crimea 11th July, and was then commanded by Captain A. C. L. Fitzroy, who was killed 10th September in the Left Attack.—Reilly, p. 188.

State, were indefatigable men, but he committed a serious administrative fault in overburdening himself with detail, not only signing trivial letters, but also seeing and approving the drafts. His troubles came thickly and heavily. At first with bated breath, but soon with loud outcry, people began to talk of the sufferings of the army in the Crimea. I myself thought it right to show him a long letter I had received from a friend who had gone to Balaklava as a tourist. The Cabinet was incredulous. Lord Raglan's dispatches were silent on the subject, and it seemed to them impossible that the case could be as bad, or nearly as bad, as it was represented to be by the *Times* and by irresponsible private correspondents. Alas! it was much worse, and the Aberdeen Cabinet, including the Duke, resigned. I had only two months under him.

I remember an incident of the period which illustrates the administrative confusion that then prevailed. A conference was held in the Duke's room some time in January, about the supply of blankets to the army, which was said to be deficient at that time. The Quartermaster-General was responsible that troops in the field, other than Ordnance corps, were supplied with these necessities. The Clerk of the Ordnance was responsible for *them*. The Principal Medical Officer was responsible for the hospital stores. The Secretary of State was responsible for all. The subject was anxiously discussed. I was present. I think the Secretary at War was also in it; but the upshot was that they all went away and gave their orders, until the aggregate reached 90,000 blankets!

The Palmerston Cabinet came into office on the 7th February, 1855. Many and dire were the reports of what Lord Panmure, the new War Minister, intended to do with the War Office. Most of the old officials thought that their days were numbered; but I fancy that Lord Panmure very soon satisfied himself that he had no fault to find with the public servants, who were a zealous, able, and honest body of men, nearly all selected for ability shown in other departments. It was the chaotic system, the division of responsibility, absolute inexperience of a great war for forty years, and the stringency of Treasury regulations that caused the machinery to break down so utterly, and the disaster of the *Prince* brought things to a crisis. At all events, none of the dreaded consequences followed. No man that I know of was removed for incompetency, and we waited in hope for the large measures of re-organization that were understood to be in contemplation, and which indeed very soon followed.

By Orders in Council, dated 6th June, 1855, the entire administration of the army was placed upon a new basis. The Board of

Ordnance, which had existed from the time of Henry VIII., was abolished by simply revoking the Letters Patent that created it. The Horse Guards was placed under the War Minister. The financial duties hitherto performed by the Secretary at War were transferred to the Secretary of State. Old offices had their duties distributed and defined afresh, and new offices were created. The country is now again clamouring for administrative reform, but nothing so comprehensive as the reforms of 1855 can ever be repeated, and if they have not answered public expectation the fault must be looked for, not in the incompetency or corruption of public servants, but in the vices of Government by Party, and in the inherent character of the English nation, too jealous of its own control of everything through the House of Commons to tolerate any effectual or efficient execution.

My own position and duties remained unchanged, and anyone who will take the trouble of comparing the latter with those of the Director-General of Artillery will see that there was no real antagonism between them. Nevertheless, the Director-General being on the Staff of the Horse Guards, I came in for a large share of the extreme jealousy with which the new arrangements were regarded by that department. But there were other causes of my then unpopularity with the senior officers of my own corps.

The Duke of Newcastle found in office as advisers to the Master-General of the Ordnance a "Select Committee," as it was termed, composed of nine officers, including the secretary, whose average length of service was forty-nine years, their average age, therefore, about sixty-six. The youngest had forty-four years service, and was about sixty-three. I took an early opportunity of calling the Duke's attention to this state of things, and to the utter unfitness of such a body to deal with the subjects daily arising under the astonishing stimulus given to the inventiveness of the country by the war. I also pointed out how very different the consultative bodies were in France and elsewhere. The Duke saw it at once. He abolished that committee and appointed a new one, which, besides being composed of much younger and more active men, recognised the principle of admitting civilian advisers, and bringing the science of the country to bear upon technical questions. Professor Wheatstone, F.R.S., and Mr. Charles Hatton Gregory, C.E. (now Sir Charles), were made members of the committee. Naturally my share in this revolutionary measure was not forgotten.

Another offence of which I was proud, although I admit that much might be said on the other side, was this.

Although the Lancaster method of rifling cannon had been known since 1850, and experimented with, chiefly on board the *Excellent*, since 1852, no effectual steps had been taken down to the Declaration of War, to supply the army with rifled field guns, yet the subject cannot be said to have escaped attention. No sooner was the decision come to that the Minie rifle was to be the arm of the British infantry, than the Marquis of Anglesey, the Master-General, after full consultation with the Duke of Wellington,¹ called upon the Select Committee to "well consider whether the Minie principle or some modification of it may not be adapted to field artillery." In pursuance of this object, a service cast-iron 4-inch (nine pounder) gun was rifled in four grooves, and in an aimless desultory manner, as one "inventor" after another brought forward a proposal, it continued to be fired from time to time down to 1st January, 1857. Of course, as the gun was a constant quantity, the only variations were in the charge and the projectiles.

Among the inventors who had a trial was a young civil engineer in Maudsley's employment, Mr. Bashley Britten, of whom more hereafter.

Mr. Armstrong, now Lord Armstrong, was introduced by Rendel, the celebrated civil engineer, to the Duke of Newcastle in December, 1853, and His Grace was so struck by his evident ability and mechanical science, that he verbally authorised him to construct one or more guns, not exceeding six, and to make the necessary experiments in connection with the subject. Armstrong prudently only made one, which was ready for delivery in July, 1855, six months after the Duke had quitted office, and the Ordnance select committee reported upon it cautiously in December, 1855, recommending further trials, and a course of experiments to which no limit of time could be assigned, nor were they in the least hurry.

Meanwhile, England was actually engaged in a great war, and the Battle of Inkerman, on 5th November, 1854, had given a remarkable proof of the value of long-ranging guns. This was employed as an argument by Armstrong himself.

Such being the state of the case as to rifled field guns in 1855, I took upon myself to represent to Lord Panmure in April that, although far from perfected, Mr. Bashley Britten had produced a projectile which could be fired from a nine-pounder gun rifled, with good effect. At 10° of elevation, the range was about $\frac{1}{2}$ greater than that of the same gun smooth bore $\frac{3.275}{2.240}$ with vastly improved accuracy. The shells also weighed $15\frac{1}{4}$ lbs. as against 7 lbs. It had

¹ See his Minute, dated May 23rd, 1851.—MS.

been somewhat extensively tried, and was the most satisfactory of the systems as yet applied to field guns. Lord Panmure actually gave the order for a battery of these guns to be prepared for service in the Crimea; but in a very few days he revoked it, in consequence, as I supposed, of objections raised by the Director-General of Artillery. It was not until 1860 that we can be said to have had rifled field artillery at all, although Armstrong was appointed engineer to the War Department for rifled ordnance in February, 1859, with arrears of salary from 4th April, 1856.

Now I am not prepared to say that, as things turned out, the war having collapsed so soon, without any campaign in the field, it was not fortunate for the country that Lord Panmure's order came to nothing. But nobody foresaw this early termination. The urgent necessity of the moment was to establish a vast superiority of our field artillery over that of the Russian army, or at all events, to convince them that we had the power of doing so, and even one battery in the field would have had that effect.

There was, in fact, no fighting in the field after the Battle of Balaclava, 22nd March (yes, Tchernaya, 16th August), but I am not at all ashamed of my advice. On the contrary, I affirm that a War Minister who allows himself to be fettered by the dilatory proceedings of committees at a moment of national emergency, is unfit for his post. The bold spirit of Lord Palmerston was not so fettered when he peremptorily ordered (May 1st, 1855) the completion of Mallet's great mortar; and when I conducted General Todleben round the Arsenal in 1864, nothing that I showed him seemed to interest him so much as that abortive construction, and the great 36-inch shells lying about. He questioned me very closely as to whether they had been ever actually fired, and it was to satisfy him and others on this subject that I printed my account of the mortar, giving all the practice.

. R. A. I.

Lord Panmure, although he suffered himself to be overruled in this matter, was alive to its importance, and before the conclusion of the war, he renewed his instructions to the committee: "Lord Panmure desires that the committee will pursue zealously their endeavour to introduce an efficient rifled battery." I have shown already what came of this.

I have already referred to the creation of a new committee by the Duke of Newcastle. It still retained too much of the old leaven, but a comparison of the two will show a considerable advance.

I can find no Diary for 1855, but there is not much to record, except hard work, before the month of October.

We moved from Woolwich Common to 54, Cambridge Terrace, in March, as I found it a great fatigue to come up to London daily. The railway stopped at London Bridge, from whence I could walk to Whitehall, or take a penny boat or an omnibus to Charing Cross. There was always a question of missing the train or the boat, and any way it took half an hour or more.

Perhaps the most interesting part of my business at this time was in connection with the "Foreign Legions," as they were termed; regiments of Germans, Swiss, and Italians, which were raised to supplement our deficiency of men. As none of these troops ever fired a shot, and as they were disbanded at the moment the war was over, they have properly speaking no history, and very little was ever known of them. The Germans, with whom I had most to do, were recruited by a certain Baron Stütterheim, of whose antecedents I do not know anything. He was a good soldier, and received the rank of Major-General. His proceedings were for the most part against the law of the States of Germany, but were connived at by friendly governments. He was paid a sum per head, and had little difficulty in getting men, attracted by what seemed to them high pay. Nor was there any difficulty with the men themselves. They were quartered at Shorncliffe, with a dépôt at Heligoland. Difficulties began when they came to be discharged; very few of them had passports, a great number had forfeited their own nationality, or were obnoxious to their own police. The difficulty was to get rid of them. Ultimately the Germans were mostly sent to the Cape of Good Hope, the Italians to Brazil, and I forget what became of the Swiss.

Lord Panmure got into an amusing scrape in clothing them. He ordered blue facings. When the Queen came to know this she was very angry, and ordered their removal. Blue facings are a distinction of regiments termed "Royal," but this distinction was never conferred on the Foreign Legions. It seems surprising that he should have made such a slip. In the end they had no facings.

Early in July my beloved wife was seized unexpectedly by a most painful attack of illness, the beginning probably of that organic disease which three years and a half later proved fatal. We were all blind to its real character, as she apparently recovered. She was conveyed to Ventnor, where Sir John and Lady Robinson were then staying, and in August we all moved to Wade Farm, near Havant.

We all returned to London in September—my dear Emily, although delicate, tolerably strong.

On Friday, 26th October, Lord Panmure sent for me, and began

the conversation by a half-humorous remark that he thought I wanted a run; that I had had no holiday (not exactly true). I suspected at once that there was something in the wind, nor was I mistaken. He wanted to send me *immediately* to Sentari. Of course I gave a delighted assent.

Could I start next day (Sunday)? I was ready. But a little enquiry showed that I could equally catch the steamer at Marseilles by taking the mail train to Paris on Monday night (29th), and so it was settled.

Armed with an order on Drummond's for £250, I left the War Office—first got the sovereigns, although the bank was closed—and then rushed home to break this astonishing intelligence to my dear wife, who received it with her native courage and brightness.

Very busy were the next two days, Sunday and Monday; but I had time to run down to Woolwich, and engage my old soldier-servant, Daniel Fry, and to get my instructions before taking my place in the mail at 8 P.M. on Monday. I never exactly knew the reason for the extreme urgency of the Government; but I imagine that they were already aware that Louis Napoleon had had enough of the war. The south side of the harbour of Sebastopol had fallen into the hands of the allies on the 8th September; the capture of the place was certain; the ministry were turning their thoughts to the meeting of Parliament, and the first necessity was retrenchment. The main object of my mission was to concert measures, in conjunction with Major-General Storks, for reducing the hospital establishments, which were upon a scale unnecessarily large for the actual and prospective wants of the army. I had, however, general authority to look into matters as regarded administrative services conducted under the War Office, and to point out economies.

The next few pages, being the commencement of a journal I intended to keep, are here incorporated; but I found it impossible to keep it up. What follows is based on the numerous pocket notebooks which I carried.

MISSION TO CONSTANTINOPLE AND THE SEAT OF WAR IN THE
EAST, 1855-56.

Left London by the 8 P.M. train, *viâ* Dover and Calais, for Paris.

Arrived in Paris about 10 A.M. on the 30th. Hotels all full. The Exhibition of 1855 was to close in a fortnight. Got a room at last "au 6^{me}." at the "Windsor," a vulgar English tavern, with a bad

salon full of noisy English and Irish. After a bath I went to the Exhibition and Palais des Beaux Arts, but I was too tired, and in too great a hurry to enjoy either thoroughly. Of the two, however, I was most struck with the latter. The jewellery of the Exhibition attracted me much, and the splendid Oriental contributions of the East India Company. I gave honour to Canada and my friend Logan by exploring the annexe until I could find it out, and by dutifully admiring the hickory blocks and walnut slabs, to say nothing of the cheese and beans.

Paid, under the new arrangements for English military officers on duty, only half fare to Marseilles for self and servant, and rushing on with Mr. Purdy, Queen's messenger, regardless of consequences to others, secured a good seat in the train—a piece of selfishness I never perpetrate without being ashamed of it.

Arrived at Lyons about 6 A.M.; an excessively dismal, raw November morning. Had four miles to go in diligence, the connection of lines across the Loire not being yet effected.

As we went southward, reaching the region of the olive, the almond, and the vine, the day improved, as much as did the beauty of the country. The sun came out, Avignon and the other historic sights on the line were brightened into life, and the magnificent fruit at every buffet made the season go backward, as on the dial of Ahaz, ten degrees.

After dinner went with Purdy to the Messagerie Imperiale. I was much pleased with the courtesy and attention of M. Geraldin, the clerk of the company. No French *employé* seems to indulge the listless indifference of many of our own. The little courtesies of manner a well-bred Frenchman has at command are to me always agreeable, and their self-control under irritation or bother is a real virtue we cannot overvalue. He gave us the best berths in the *Caire*.

I put up at the Hotel de l'Empereur, a large, rambling old house, with astonishing passages, doors made when hoops were worn, and furniture as antique as the rooms.

November 1st.—Embarked at La Joliette, the famous port of Marseilles, about 10 A.M. Found 500 French soldiers filing on board, a few of them intoxicated, especially one corporal; the generality quiet, and only anxious to throw off their heavy kits, the whole looking mean and dirty. They were drafts from a variety of regiments, including a dozen or two of Zouaves, and we became good friends after a time.

Mr. Barrett (War Office) was on board, a sort of agent for the

purveyor's department and for clothing at Scutari—a gentlemanlike young man, who has just comforted his banishment with a wife.

He tells me that the Commissariat has no agent at Marseilles. Having lately made large purchases of preserved vegetables in Paris, that department had them sent to Deptford for shipment, apparently unconscious of the existence of this port, or its connection with the East. Promised to point out to Mr. — that Marseilles should be his shipping port. The French, he says, will ship for Constantinople at £4 a ton ; indeed, I think he said £4 a ton to the Crimea, cheaper than sending a vessel like the *Calcutta*, burning £52 10s. a day in coal, and costing £200 a day in hire whether working or not.

Our party in the first cabin is as much English as French. Dr. Sutherland, one of the sanitary commissioners in the East ; Dr. Wordsworth, civil surgeon from Smyrna Hospital, now going on to the Crimea ; Captain Fenwick, of Turkish contingent, a loquacious, good-natured young fellow, talking the most audacious French with a serenity and self-satisfaction I never saw equalled ; three or four other Turkish contingent officers, some from our own, some from the Indian service ; a French colonel of Zouaves, and two majors of the *état majeur*, fine soldier-like looking men. We have 500 soldiers on board, and a full proportion of officers, captains and subalterns ; the latter, according to the custom of the French service, live in the second cabin, where they have for companions some ex-London policemen going out as commissariat issuers, and Daniel Fry, my servant.

Land was in sight at 8 A.M., and continued so all day. Took the outer passage through the Straits. Heavy rain, to the great discomfort of the troops on deck. The night clondless and starlight. We had a good view of the rocky, precipitous coast of the Sardinian group, and of the islet where the disastrous loss of the *Semillante* French frigate took place a year or two ago.

November 4th.—A lovely day, and a delightful passage past Gozo and along the coast of Malta, with little vegetation and no very bold features. Something in the colour and aspect of the rocks and slopes, the white houses, the symptoms of an industrious population, the secure approach, the calm glittering sea, and the magic of the British flag, give an interest and a charm to this scene which one does not feel in others of much greater natural attractions.

Went on shore between 11 and 12 o'clock, and, in going up the famous stairs of Nix Maugiare, met two acquaintances, with their prayer-books under their arms, proceeding home from church. Dalzell asked me to dine with him, but I excused myself. At the

next turn was an Artillery guard, and I found a couple of brother officers, both strangers. Went round their barracks to see the men's dinners. Immense vaulted rooms, with walls six feet thick, and cool stone floors, in extraordinary cleanliness.

Then walked to the church. After seeing the inside of the church, followed the Governor's party to the palace. Lunched there. Sir William Reid most kind, and inquired particularly after Maxwell. "How's that clever brother of yours? What an odd fellow he is! How he used to make me laugh! 'Have you been thinking over that last theory of mine?' he would say. 'Ah! that's a pity: you ought to have thought a little more about it.' I said to him one day, 'When do you consider a man to belong to the respectable class in that colony of yours?' 'As soon as he's worth a gallon of rum,' says your brother."

He spoke with great kindness of M., and with the regret that all his friends feel at seeing great talents wasted over projects that can never come to anything; the opportunities of the present hour postponed or neglected. The actual overlooked in the pre-occupation of the mind with its own dreams. The vision perpetually averted from what is real and present, to dwell on distant and imaginary objects. Were it not that M.'s purity, integrity, and simplicity of character have themselves a promise and a blessing unknown to the wisdom of this world, one would despair of such a career.

Poor little Louisa Allan, who was on her way to Egypt, and who died at Rome 12th May, 1852, happened to be at Malta in November, 1851, when the Reids arrived, and describes in a letter to her mother the extraordinary unpopularity of this appointment. Although his predecessor, Mr. Moore O'rerrall, was a civilian, the generals and admirals, one and all, took offence at a mere lieutenant-colonel in the army being appointed "*Governor and Commander-in-Chief*," the formula in all colonial commissions. The commanding Royal Engineer, Colonel Emmett, being his regimental senior, resigned; the Acting-Governor, General Ellis, threatened to do so. However, nothing happened, and people learned to value their Governor as he deserved.

It was a sad fatality for Emmett, for he had actually been C.R.E. at Bermuda when Reid was appointed Governor there, and he then resigned.

I left Malta at 9 P.M. on Sunday, November 4th. I had an interesting conversation with Dr. Sutherland, who considers the expectation common in Turkey of the fall of the Mahometan power

400 years after its establishment at Constantinople (see Gibbon) to be based on a tradition of the prophecy of St. John, Rev. ix. 14, to be indeed the echo of the "voice from the four horns of the golden altar which is before God, saying to the sixth angel which had the trumpet, Loose the four angels which are bound in the great river Euphrates . . . which were prepared for an hour and a day, and a month and a year." These periods, on the year and day principle, amount to very nearly 400 years, actually to 391=A.D. 1844, the date of the Ottoman edict of toleration.¹

¹ Four hundred solar years from the taking of Constantinople expired 1853, and 1856 marks the date when the independence of the Porte came to an end. It is so given by Mr. Grattan Guinness, a high authority. Morier says, however, that the Turkish expectation was that the seat of government would be transferred to Damascus.—(Ayesha, 1834).

CHAPTER XI.

WE reached Smyrna, November 9th, early, and here my duties began. I went on shore about 9 A.M., and after getting, with much difficulty, a sort of breakfast at a French *café*, took a guide to the hospital. The narrow, crooked streets were filled with Turks and Greeks, and with a few Franks ; the first in dirty, but most picturesque, attire of the old Turkish type. Porters with enormous bales on their backs, carried in a sort of triangular pad, pressed past us. Several long strings of camels picked their way through alleys and crowded bazaars, that one might shake hands across.

I found Dr. Mayer, the physician in charge of the Civil Hospital, which contained at the time about 220 sick, but no wounded. It could make up 550 beds, but the medical staff was upon even a larger scale. My visit was entirely unexpected, but as my powers were ample, and the War Minister's instructions very clear, I was met with much respect and courtesy.

After thoroughly inspecting the hospital, I rode off with Major Chads, who was in military command, to the Lazaretto, about one and a half mile distant, then occupied as a barrack by about 220 men. It was a lovely road along the sea-shore, but only eastern horses could have gone at a gallop as we did, so rugged was it. Here a hospitable officer refreshed us with bottled ale, and after a close inspection, we returned to the hospital. Here I gave a number of instructions to be carried out, in anticipation of the reduction of the establishment ; got a list of stores in hand from the purveyor, and then went off to lunch with Chads, who afterwards put me on board just in time.

Smyrna Bay looked very lovely from the ship, but those dark hills which form an amphitheatre round it, were still so dangerous that officers could not venture beyond five or six miles, nor then unarmed.

Dr. Mayer volunteered to accompany me to Constantinople ; a fine-looking man, with high, square forehead. He had been on the convict establishment in Van Diemen's Land. . . .

Dr. Mayer's experience was that the older physicians were first-rate men (the late Professor Rolleston was one of them). He allowed them the exclusive care of cases without interference from the seniors

(four in number), who attended only to their own patients. Surgical cases were managed by the surgeons in a separate division, but some of the junior surgeons were pretty good physicians, and *vice versa*. On the whole, however, he considered the division a real one : it worked very well.

The lady in charge of the nursing at Smyrna, on whom I left a card, was Miss Le Mesurier. Mayer said that the ladies and nurses had saved many lives. At the same time he did not think female nursing likely to outlast the enthusiasm and the necessity that gave rise to it. (In this he was mistaken.) The difficulty he found was to subordinate the female establishment to the Medical Chief. He had had to send home some ladies and many nurses who were unfit for their posts. He had then a set that he liked, and regretted having to break up. I was, however, surprised to observe that some of them were comparatively young and good-looking women.

General Storks' opinion was that Roman Catholic nurses were moral and useless ; Protestant nurses immoral but useful. He and Miss Nightingale were both of opinion that no unpaid services should be accepted.

We touched at Mitylene on the evening of leaving Smyrna ; the next day at Gallipoli, and reached Constantinople on Sunday, 11th November.

I was General Storks' guest at Scutari from the 12th to the 21st November, his quarters being a part of the vast building used previously by the Turks as a barrack, but by us converted into a hospital. It was returned as capable of accommodating 1,683 sick, and 240 orderlies ; but the space being variously occupied, there were on November 10th, only 914 vacant beds, with 430 sick, giving (exclusive of orderlies) a total accommodation of 1,344, and on the 10th December. of 1,352.

General Storks being very much engrossed by his multifarious duties as Commandant, the work of visiting the various establishments, calling on officials, and collecting returns, devolved chiefly upon me. I did collect a great deal of information for the War Office. The papers are bound together in a volume lettered "Hospitals in the East," which was for some time in the hands of Mr. Kinglake.

I went up to Therapia on Friday, 16th November, with Storks, to dine with our Ambassador, Lord Stratford de Redcliffe, a man who had made more history than most of his contemporaries. We found him a dignified, courteous old gentleman, with no offensive hauteur or peculiar irritability apparent. Lady Stratford reminded me of Lady

Robinson, than which I could not say more in her praise. The beautiful Lady George Paget and two Miss —— were there—tall, elegant girls, stupid enough, Storks declared, for any man's happiness, quoting Talleyrand : “ Il faut avoir aimé un esprit pour connaître le bonheur d'avoir aimé une bête.” The gentlemen were the Duke of Newcastle, recently returned from his visit to the Crimea, Colonel Mansfield (afterwards Lord Sandhurst), Colonel Douglas, and four or five *attachés*. After dinner and a glass or two of wine, the gentlemen offered their arms, and all retired together.

In the drawing-room, the Duke, somewhat to the surprise of the *attachés*, honoured me almost exclusively with his conversation. As all the persons mentioned are dead, it is no indiscretion to record it. . . .

The Duke thought road-making had been overdone, men having been taken for that who were urgently wanted elsewhere. Our sapping was miserable. It was a calumny to say that the soldiers would not work when properly shown how. Storks declared that the cavalry worked better than the infantry, and the guards better than either. The trenches were shallow, narrow, uneven, giving next to no shelter in many places. We lost two months in sapping up to the quarry, which was known to be of no importance. It cost seven officers and nearly a hundred men. On the other hand, we grossly neglected to sap up to the Redan, although there was plenty of time. To the last the Engineers declared the distance to be only 80 yards; he paced it, and found it 197 yards. There was a miserable pretence of sap, which he nicknamed “the gutter.” It gave no shelter, and was never completed.

The Duke did not know Colonel F. Warde, R.A., or Colonel J. St. George, R.A., though the whole credit of the organization of the siege train was due to the former; but he spoke in terms of great respect and affection of Colonel David Wood, R.A.

On the whole his favorite hero was Major-General Wyndham. He thought him a clever and most gallant soldier, although excessively indiscreet with his tongue. He went to the Duke on the evening of the 7th September, the day before the second assault on the Redan, to ask him to take charge of his will. He was to lead the assault, and knew he could not come alive out of it (but he did). It was basely asserted that he turned his back on the enemy. It was true that, finding the supports in the trenches did not come on, he walked back through a storm of shot to bring them up. It was under 200 yards. He did not even descend under cover, but stood on the parapet shouting with violent gesticulations and frightful oaths to Codrington to come on. “Give me a regiment, sir, and, by

God, I'll take the Redan at a canter." It was in vain ; not a man moved ; and Wyndham, with rage in his heart, returned to the Redan. I discussed the subject subsequently with many officers, and there was no difference of opinion as to Wyndham's heroic bravery.

The Duke told me, either on this or some other occasion, a story too curious to be omitted.

A certain officer of Engineers, —, was taken prisoner by the Russians, and released under rather unaccountable circumstances, without exchange. This officer brought back fabulous stories of the strength of the Redan ; of its interior entrenchments ; how it was mined all over. He babbled everywhere, discouraging everyone, and so contributed to the English repulse. He subsequently pretended that he had been blindfolded, and had mistaken the Malakoff for the Redan. "If so he was a fool, and if not a traitor ; but it is doubtful whether he was ever blinded. Had the Emperor of Russia paid that man half a million for the mischief he did, it would have been cheap at the money." This gentleman received his brevet in due course.

I have introduced the dinner at Therapia a little out of order.

November 12th.—Wrote to Lord Panmure. Went round the Barrack Hospital with Dr. Linton and Dr. Mayer ; afterwards rode with General Storks, and Gordon, R.E., by the Victoria Huts, the General Hospital and the cavalry stables.

I left a card of enquiry on Mrs. Moore, widow of an officer who lost his life very gallantly in the wreck of a transport. She afterwards devoted herself to a special ward or hospital established for sick and wounded officers.

November 13th.—The *Melbourne* left, and Dr. Mayer returned in her to Smyrna. The Admiral took great offence at Storks giving her captain some directions in writing. I went down at 10 A.M. to the Palace Wharf, to see some sick landed, then to the Land Transport Camp, and through Victoria Barrack.

The Land Transport Troop consisted of—

Officers	...	...	2	Natives	...	...	50
Troop Sergeant-Major	1			Horses, chargers	...		4
N. C. Officers	...	7		Ponies	...	...	9
1st class Drivers	...	22		Mules, Pack (1 had died)	99		
2nd class	„	...	34	„ Draught	...	100	
Artificers	...	...	4				

These people had left Balaclava in the *Simla* on the 6th, with provisions and water for five days. The animals were fed on board at 6 A.M. on Sunday, and got neither food nor water after that for thirty-three hours, until fed on shore at half-past three on Monday.

The cavalry in the same vessels managed to land their horses on Sunday. The sailors could not spare water for so many animals.

I rode to Kulali with Storks, his A.D.C., Captain Maitland, and Dr. Hadoway. Then round the Convalescent Hospital and stables, then round the wards with Dr. Humphries, where a poor lad was pointed out whose leg had been twice amputated.

November 14th, Wednesday.—Cholera suddenly broke out, and was unusually fatal for a few days. Between the 13th and the 19th there were 139 cases, and seventy deaths in our hospitals.

I went in the forenoon to Pera and Galata-Serai, where we had a hut hospital, in charge of Dr. Halahan. Each hut, for ninety patients, was 60 feet by 19 feet, and 10½ feet to the ridge, giving 805 cubic feet per bed. Then rode to Hyder Pasha stables, which were very badly ventilated. It was agreed to take out a plank all round. We met the Duke of Newcastle, Lady Stratford de Redcliffe, Lady George Paget and Lord Napier.

Tête-à-tête dinner with Storks—a very amusing companion.

November 16th.—I went round the garrison library and the convalescent library with the Rev. Mr. Hadow, senior chaplain; afterwards round the Purveyor-General's store, and examined the method of book-keeping.

The garrison library was free to the troops, and composed entirely of free gifts. It was in a very disorderly condition. . . . There was a very miscellaneous lot of religious books apart. The best books were some presented by the Queen, chiefly historical.

The convalescent library and reading-room, from which books were not allowed to be taken, was superior in every way.

This was the day of the dinner at Therapia, and of a terrible accidental explosion in the French Artillery Park—30,000 k. of powder, 600,000 cartridges, and quantities of shells.

November 17th.—I devoted this day to enquiry into the working of the Parcels Post. The office was in Pera, and in company with Mr. Dickson, Storks' dragoman, I visited some of the sights of Stamboul.

I dined with Colonel Edward W. Crofton, R.A., who commanded Osmanli troops. He had taken a Turkish house, and brought out his family. Major Robert Miller Mundy and Captain Bredin, R.A. were of the party. Bredin commanded a troop of Osmanli Horse, with local rank of major, and his emoluments in that capacity amounted to the handsome sum of £994 per annum. There must have been many Indian officers in the Turkish contingent whose pay came to a good deal more, as they still drew Indian pay. This is the

price Turkey paid for the national decay, which made it impossible for her to officer her own levies.

Many amusing stories were told round the table. One of those by Bredin. He was in a battery on some occasion with B. and Strange (H. F., best known as Paddy Strange). They were keeping a good look out for shot and shell, when a sergeant, distinguished for his sharp sight, called out "Whistling Dick!" a nick-name they gave to the Russian heavy shells. Down dropped B., down dropped the other two; but Paddy Strange, in a curious manner, kept his knuckles a few inches above B.'s head. The shell burst, and down they came, with no light blow, upon it. "Oh, I'm hit! I'm wounded!" he cried. "Sure," says Strange, "I hope you're not badly hurt," and, whipping out his handkerchief, he had the head muffled in it in a moment. Bredin, who saw the joke at once, did his best to carry it on, and it was some time before they let the poor fellow know their trick. Instead of being thankful, he got in a rage!

November 18th, Sunday.—I attended service in the General Hospital. Litany and Holy Communion. The latter was attended by three nurses, four patients, and one orderly, besides myself. The singing was good. In the afternoon I devoted three hours to the hospital under Dr. Lawson's guidance.

The day was marked by a curious romantic event. A sergeant and three men of the Jäger Regiment, German Legion, deserted in full uniform, carrying their arms. They were pursued and overtaken by a captain of the same regiment, or, rather, he found three of them, and, being a strong and determined man, he made them prisoners and handcuffed them. On enquiry for the fourth, the sergeant, he was *dead*. He had died in the night of cholera. These poor fellows were bound for Kars! They declared that they had no intention of deserting, but would have rejoined their regiment in the spring.

Dr. Lawson had two civil medical officers under him, who had military assistants. The system worked ill; there was much friction and jealousy. He considered one medical officer to fifty patients hardly enough to meet contingencies. He would have one to forty. Last winter nearly one-third of the doctors were occasionally laid up. He very rarely allows separate cooking by the ladies or nurses. They get medical comforts in the way of diet at the regular kitchen, where I found three soldier cooks for 400 patients. These men were equal to any plain cooking. I tasted the day's issues. All were excellent, and no complaint was possible on that score.

The ladies can only give what is on the diet-roll. Dr. Lawson had no difficulty with them, but did not think very highly of their services. He seemed to consider orderlies as good, in which I could not agree with him. He considered one orderly to ten patients enough in ordinary times, but one to seven or eight necessary in times of trial. The system broke down in the winter of 1854-55 for want of hands. It was not till December, 1854, that Government authorized the necessary expenditure.

In 1854 the ventilation was bad, and the cubic space only 750 feet per bed. In 1885-86 the ventilation was much improved, and cubic space increased to 900 feet.

He had tried all sorts of treatment for cholera. Nothing seemed to have much effect. On the outbreak of the 14th of this month the troops were as much as possible moved out of quarters and placed under canvas.

November 20th.—Again round the hospital with Drs. Sutherland and Linton. Particularly examined Soyer's kitchen, erected near the purveyor's stores last March. It is calculated for 3,000 men, and could deliver to the orderlies that number of rations for any meal in twenty minutes. He has not since May cooked for more than 1,500 men.

Although the troops had been so long in Scutari, and so many houses were occupied by persons connected with the army, no steps had been taken to name the streets or number the houses. I took the first step this day by giving numbers to the streets, on the American plan.

November 21st.—I embarked to return to Smyrna. Left the anchorage at 5.30 P.M. in the *Canadian*.

November 22nd.—Landed at Renkioi to inspect the Civil Hospital, 11 A.M. to 5.30 P.M.

The principal medical officer was Dr. Parkes, afterwards of Netley, one of the ablest of the medical staff. The whole establishment being under able and undivided authority, was a pleasing contrast to most of the others; in many respects the model hospital. Owing, however, to the greatly improved health of the army since its completion, it had never been filled, and was over-manned. The married doctors had established a mess, at which I dined.

It was here, I think (no, at Abydos, December 5th), that I found a French hospital, and called on the P.M.O., who was so extremely cordial that, on getting on board, I sent him a dozen of ale. His gratitude was delightful, and he sent me back a handsome supply of delicious bread.

November 23rd.—Landed for a short time at the Convalescent Hospital at Abydos. It was adapted for 390 patients. A ward 40 feet by 30 feet, which was scheduled for twenty-four patients or thirty convalescents.

Reached Smyrna again at 1 P.M., and took up my quarters at Dr. Mayer's, whose charming wife made them very attractive.

November 24th.—I completed my business at the hospital, settling, with Dr. Mayer's advice, what medical officers, ladies and nurses should be provided with passages home, and who should be kept on as a nucleus of staff in the possible, but very improbable, event of the hospital being re-opened. Among the latter was Doctor, afterwards Professor, Rolleston. By way of utilizing their time, I called upon them to make a sanitary report on Smyrna and the vicinity as bearing on the health of any British troops. This in due time they did, and it was printed, but obtained no publicity, as everything came to an end.

I have remarked on the insecurity of the neighbourhood of Smyrna. I accompanied Dr. Mayer one evening to the ancient castle near the town. We both carried revolvers, and thought it prudent not to prolong our visit, as there were suspicious-looking gentry about; but I felt in much greater danger in a visit paid to the lunatic asylum. Mrs. Mayer had a fancy to see it too. I doubt if she had asked her husband's approval. One of the doctors and a cavass accompanied us, and, of course, one of the attendants. We passed quietly enough down a long corridor, glancing into the cells; but came to one at the end, where the patient, a tall, powerful man, was thrown into high excitement by the unexpected apparition of a lady—an excitement which speedily communicated itself to some of the others. The moment we perceived it we hurried Mrs. Mayer back to the entrance, accompanied by the maniac, from whose near approach we guarded her with difficulty. It was with a sense of great relief that the doctor and I got her out of the place.

I only noticed one man under physical restraint (this was, however, at Magnesia); he was chained to the wall. I approached him rather nearer than was prudent, and took notice of the way the attendant stood at my back with his right hand just above my shoulder, to draw me back on the slightest threatening movement, but the poor man did not interrupt his monotonous singing and drumming. The place was reasonably clean and well kept.

November 25th, Sunday.—Rode out to Boudja, as the English church was there. I remember nothing specially of the service, but recall a story of Dr. Mayer's.

Mr. Lewis, the English chaplain at Smyrna, gave a service every Sunday at Bondja, but not long since had occasion to be absent a few Sundays, leaving a stranger to do his duties. This gentleman, unacquainted with the customs of the country, was shocked at seeing the ladies come to church with heads uncovered, and preached against it. Finding them slow to reform, he publicly announced that he would refuse the sacrament to any woman who presented herself without some covering on her head. The ladies were inclined to rebel, but finally gave in, and all came bonneted on the next occasion. All but one, who happened not to have been present when the warning was given. This lady was about to remain, when a friend whispered to her the state of the case, and exhorted her to tie if it were but a handkerchief over her locks. Alas! the old Eve was too strong. Her "week's preparation" vanished in a moment, and she indignantly left the church. The case was referred to the Bishop of Gibraltar, who wisely decided that the chaplain had perhaps been injudicious, but that the ladies had better respect Saint Paul.

The finest modern church in Smyrna was the Armenian cathedral, still unfinished. It had already cost £115,000, and it was calculated that it would take about £46,000 more to finish it. The shaft of each column was a single block of marble from Tenedos. The vestments and mitres worn by the priests were splendid. The high altar rose in many stages to a great height, each being covered with artificial flowers in pots to resemble real ones.

I gave much amusement to the idle crowd by taking some rubbings of inscriptions in the Armenian character with heel-ball; the process was evidently quite new to them.

The following answers were obtained by the dragoman from one of the priests:—

How was the money raised for building the new Armenian cathedral?

Answer.—Partly by donations, and by a surplus income belonging to the church. They were also obliged to raise a loan of 300,000 piastres, on which they pay interest.

Do the Armenians in Smyrna consider themselves a nation or a religion? If a nation, what is their country?

Answer.—When Armenia was conquered by the Tartars, many of its inhabitants left their country, and though centuries have elapsed since then, they still consider themselves as belonging to the Armenian people, both in religion and in nationality, and that their country Armenia has been divided amongst Turkey, Russia, and Persia.

How many Bishops have they in Smyrna?

Answer.—One Archbishop.

How many Priests ?

Answer.—Twelve Priests.

What are the Priests paid ?

Answer.—The clergy have no fixed salary ; voluntary contributions are made them by their people. They are also paid for performing marriage ceremonies, christenings, and burials.

How many Armenians altogether are there supposed to be in Smyrna ?

Answer.—Five thousand.

Are there many copies of the Holy Scriptures among them ?

Answer.—Yes, there are.

Is the Bible read in the church in the common language, or in some old language ?—and the Prayers ?

Answer.—The Bible and Prayers are read in the church in ancient Armenian.

Are the clergy allowed to marry ?

Answer.—A person must be married before taking Holy Orders, but he cannot get married after being ordained. Bishops and Archbishops, however, must be single.

CHAPTER XII.

November 27th.—I left Smyrna at 7.30 A.M., in company with two of the medical officers, and either Major Chads or his brother of the R.N., I am not sure which, to ride to Magnesia, for the purpose of examining into the fitness of some large barracks there, for the occupation of some of our troops during the winter. We had, of course, a cavass. The distance was about thirty miles, and the road, which was partly a Roman one, passed over the lower spurs of several hills of evil repute, but we were all armed with revolvers.

Our first halt was at the second guard-house in Nartikoi, with Bourmabat to the left and Bournabashi among the hills to the right. We were still in the plains, which were fragrant in the thickets with myrtle in fruit and flower; arbutus with ripe fruit, and many other shrubs. We skirted the Careening Bay, where there was a paper manufactory on the reputed site of a temple of Diana. The plain was full of ancient olive-trees of great size; one that I measured was 20 feet 9 inches in circumference 3 feet from the ground.

At 10.15 reached Tehamkhioch. The village of Yahkahkoi is about three miles off N.E. Here the ascent began, and at this stage we travelled on an old causeway, very much out of repair. At 11.30, a guard-house well supplied with water; at 1 P.M. we reached the foot of a long descent at Topalkaioi. The road not practicable for artillery, and hardly for cavalry, unless in single file. Here and there were remains of the causeway. We reached our khan or caravan-serai at Magnesia at 3.15 P.M.

Our first duty on arriving at Magnesia was, of course, to wait on the Kamaikam Suleimaneh, the civil magistrate or governor of the district under the Pasha of Smyrna. He received us with the dignified politeness natural to the Turkish officials, and offered us coffee and sherbet, with the indispensable pipe. Of course we were at liberty to go anywhere.

Postponing visits of inspection until next day, we indulged ourselves with a Turkish bath. The hottest place was at 95°, the next 88°, and the last 73° only. We had a glass of Greek wine some excellent coffee, and a cigarette.

Magnesia (population cir. 45,000) is situated in a fertile plain, well cultivated, the fields being in some cases divided by hedges or banks. They grow tobacco of first-rate quality, and there were quantities of vines climbing over almond, cherry and plane trees.

Our khan (which the dragoman spelt "chan") was the largest but one. It was Yoni chan, divided into rooms of about 14 feet by $10\frac{1}{2}$ feet, with strong iron doors. Of these there were thirty-two on the first floor, all numbered. I expected to find the figures much more like what we call Arabic numerals than was the case.

There was stabling for about seventy horses, but I could not find more than forty rings for tying them up. Our horses got a feed of chopped straw and barley at 8 P.M., not even water before; but the cavass, who was a fine-looking fellow, was drunk, which probably accounted for neglect.

We got a very good dinner, chiefly kabobs and curds; and in the evening a gentleman asked to be permitted to pay his respects to us. He proved to be a young Turkish gentleman, who had never, so he said, been out of Magnesia. The object of his visit was to ascertain by trial whether he had learned French correctly, and could speak it so as to be understood. I thought this a very remarkable evidence of intelligence and manly confidence. His French was limited and oddly pronounced, but it was quite intelligible as far as it went.

My doctors seconded me with great good will in making measurements of the barracks, etc. The buildings could not have been entered without a great deal of repair to roof and floors, and my report was unfavourable to any attempt to utilize them.

On referring back to my note-book, I find that our first visit was to the Commandant Hamet Bey, who we found engaged in receiving recruits, about 400, and as many old levies. He expressed his pleasure at seeing us, and ordered the Cavass-Bashi (chief of police) Shulamaneh to devote himself to us. Had we any news? We informed him of the destruction of the Russian magazines on the Sea of Azof; that Bashi-Bazonks had behaved *en braves soldats* at Eupatoria, and that Oman Pasha had passed a river, carried some batteries, and arrived at Tiflis. He evidently did not recognize Tiflis as we pronounced it—perhaps had never heard of it. We paid him a second visit after our inspection, when he affirmed that if we would give him a fortnight's notice, he would have everything ready for troops. He could give up some old *koniks*; place could be found on the hill for a hospital; plenty of timber might be had from the Turcomans in the mountains; forage was abundant, and supplies of every kind. There was plenty of game in the neighbourhood.

We were shown one object of real interest at the hospital ; it was a Genoese apothecary's mortar in brass, fourteen inches high, and fourteen inches in external diameter, with an inscription in Lombardic characters, of which I took a rubbing : I suppose of the fifteenth century. It had a handle on each side, and a fluted band round the middle. I confess I greatly desired to possess it, and with that view gave the Cavass-Bashi a sovereign, on his solemn promise to convey it to me at nightfall. As I had no more business to buy it than he had the right to sell it, I was deservedly punished by seeing no more of my sovereign or of the mortar. It was, however, a relic entirely thrown away, for no one seemed to attach any interest to it, and it was not put to any use.

November 29th.—We left Magnesia at 6.15 A.M., and reached Smyrna at 2.50 P.M. A grand old Turk saluted us at the half-way rest at Yahkankoi, with : “Englez bono ! Fransiz bono ! Turcos bono ! Ruski no bono ! yah !” and a younger man came in whose excessively picturesque attire I tried to sketch. His red skull-cap was bound, turban fashion, with a scarf of buff and red intermixed with a little green, and falling behind in long tags upon a red jacket embroidered in front. The jacket was confined by a purple sash, but with an interval of white shirt appearing between it and the more ample sash of black, yellow and red round his loins. He carried two gold embroidered cartridge boxes, and his yataghan and pistols were thrust into the latter sash. He wore short, full, white trousers, under which his brown knees appeared. The lower limbs were encased in black greaves ; slippers yellow.

I fear that such a national dress might be looked for now for a long time, if it exists anywhere.

November 30th.—A French steamer from Jaffa came into the harbour, having on board about 118 Arabs, Mangrabbis, negroes, Berbers and other wild beings engaged as native drivers for our Land Transport service.

These people got up a quarrel, and so frightened the French captain that he immediately sent off to a French brig of war for help. The captain of the brig, burning with valour, loaded his guns with *mitraille*, determined to sink the packet ship, “*plutôt que la voir prise devant ses yeux par ces Brigands de Bashi-Bazouk !*” He also sent on board about eighty men armed to the teeth. The unfortunate natives seized the handspikes and belaying pins, and a very unequal fight ensued, in which eleven of them were wounded. They were of course overpowered and hustled on shore, where the Pasha made prisoners of them. I heard most exaggerated stories of the

row, and after seeing the British Consul, and the captain of the brig of war, I went off to the Konak to see the Pasha. I found H. E. smoking a pipe with Ahmed Pasha, a distinguished visitor from the Crimea. Pipes were ordered for Dr. Mayer and myself, and we gravely discussed what was to be done. His prisons were full. He did not want such a number of men.

The old Turkish brig, in which it had been proposed to take them on, had no room for so many, so he demanded what *I* was going to do—I having gone in the impression that the whole affair was in *his* hands. However, I readily agreed to take them on in the *Melbourne*, a transport by which I was returning to Constantinople, and the chief of police, Ahmet Bey, was told to fetch them all down. Accordingly they were soon paraded for my inspection. A villainous-looking lot they were: almost all had lost one eye; they were all sizes and colours, from jet-black to whitey-brown, and in every sort of dress, from the regular Arab burnouse to dirty Greek finery. Some stood up; some squatted down; all looked doubtful whether they would be led to instant execution or not.

I ordered them all on board, and armed a dozen or two of convalescents going to Abydos by way of guard. Several medical men were going on from Smyrna, and two or three officers. We could, therefore, have readily suppressed any mutiny, but our revolvers were not required; a more good-humoured, inoffensive set there could not be, and we landed them at the Dardanelles without the slightest trouble.

I amused myself by measuring the whole number; their average stature was 5 feet 6·12 inches. Thirteen of them were over 5 feet 9 inches, and seven of them under 5 feet 3 inches. They would have compared favourably with most infantry regiments at this time.

I made a special report of the whole occurrence to Lord Panmure, as I thought it possible that some exaggerated account might reach the Government from the French; but I heard no more about it.

I embarked for Scutari at 4 P.M. on Saturday, December 1st.

Among my fellow-passengers was a paymaster, Mr. McDonell, from whom I learnt a great deal of the extreme difficulty of working our complicated system of accounts.

Men were frequently embarked at Balaclava during the winter without documents or returns of any kind. In other cases their accounts were lost at Scutari, and in this condition they were passed on to him at Smyrna. He had nothing to show what was owing to them, or what they owed their captains; wrong names were often given. It was impossible for him to close his accounts.

A very improper practice prevailed in the Crimea of debiting with a month's pay or more in advance to recover debts when they left the command. The soldiers' small pocket account books (Tommy Atkins) were of no use; they were generally lost, and very seldom made up at all; the poor fellows themselves, from long sickness or suffering, rarely knew how they stood. Captains of companies were negligent, and pay clerks and pay-sergeants were constantly changing. To protect the public and himself he was obliged to overcharge and underpay the men, *i.e.*, to stretch stoppages to the utmost; for instance, to charge ship rations on days when he knew the men could not have been rationed on board. Men would sign anything to get a little money down.

I confess, as I transcribe this, it seems hardly credible; but I am quite sure the paymaster related what he knew, and related it to me in hopes of improvement.

He said the French "Tommy Atkins" was much more simple than ours, which I found to be the case.

December 4th.—Landed at the Dardanelles, where we had our overland transport dépôt. It amounted to 2,085 horses and mules, with 614 drivers, exclusive of the 113 natives I brought up from Smyrna.

The British Consul, Mr. Calvert, very kindly offered me a bed. He was an extremely intelligent and agreeable man; spoke Greek, Turkish, Italian and French, and his wife, *née* a Miss Abbott, of Smyrna, spoke them all but Turkish. He had been in the Levant since 1834, and possessed, in her name, a large farm on the plains of Troy; in her name because, although Christians could not hold real estate, the law took no notice of the religion of women.

Probably the last Pasha put to death in the old-fashioned summary manner was the Pasha of the Dardanelles in 1834. He was first superseded, and then his successor was ordered to give him a cup of coffee! Both well understood. The victim asked for a few minutes to say his prayers, enquired if it was painful, called for his pipe, took the coffee, and smoked as long as he could. He was dead in ten or fifteen minutes.

The then Pasha (1855), Djemal, was a remarkable man. He had never been in Europe; but had written two books—one on the immortality of the soul, the other on the future of Turkey. Disputing with a Mollah, who objected with horror to his contention that the time had come for some other code of law than the Koran, he turned—

"You have the Laws of Moses in your Bible?"

“ Yes ! ”

“ You believe they were given by Allah ? ”

“ Yes ! ”

“ But you don’t observe them now, because the whole world is changed ? ”

Calvert acquiesced, without pointing out where the analogy failed.

Then the Pasha triumphantly turned to the Mollah—

“ You hear what he says ! The laws of Mahomed were good laws when he gave them, but their day has gone by. We want something more.”

The Mollah had nothing to say.

Calvert also related a conversation with a Pasha in the interior. The Pasha said his race was dying out ; the deaths outnumbered the births ; wealth and land were all passing into the hands of Christians. By-and-bye the Sultan will not be able to recruit his army from Turks. Then they must have rank ; we shall have Christian Pashas, and the time will come when, to preserve his Empire, the Sultan will have to turn Christian himself !

Calvert said he knew Widdin Hussein Pasha, formerly Aga of Janissaries, by whom they were exterminated in 1826, as the Mamelukes in Egypt had been in 1811. When he went to the Sultan to report, he simply said, “ The Janissaries are all dead but one, and here he is ! ” presenting his own neck ! The Sultan immediately unclasped his own sword-belt, and with his own hand clasped it on Hussein.

The Pasha clapped his hands and cried, “ Fetch me that sabre ! ” It was brought. Afterwards the Sultan sent him a splendid pair of pistols, which were also produced.

Calvert put the number killed at 80,000 : probably a great exaggeration. He said that he found few subjects more attractive to Turks of the interior than an account of our mode of government. They would stroke their beards and say, “ God is great ! When shall we be treated in this way ? ”

The war had, so far, been an immense benefit by the money it circulated : the peasantry had paid up eight or nine years’ arrears of taxes, and sowed twice as much barley as was ever known before. As an instance of a contractor’s profits, he gave the case of a Mr. —, who got a young and very green commissariat officer to sign a contract for foraging 4,000 animals, some of them Beatson’s Horse, at 1s. 8d. or 1s. 10d. a day. The profit must have been about a shilling a day per horse ! Mr. — had recently shown a friend of Calvert’s how he had already cleared £30,000.

It was here I first saw the Caruba pod (*Ceratonia siliqua*) locust, largely used for feeding horses. It is now to be had in England at £5 15s. a ton, but was very little, if at all, known before this campaign.

December 5th.—I visited the Asiatic Fort, chiefly to examine the enormous bronze guns for which it was so famous, until the Turks, a few years later, replaced them by Armstrong's guns. I have given an account of them in the "Proceedings of the Royal Artillery Institution," which was reprinted in the "Archæological Journal," 1868, Vol. XXV.

The most ancient which I noted were—

	A.H.	A.D.
No. 1.	862	=1454
„ 2.	868	=1464, now at Woolwich.
„ 3.	927	=1520, from Bagdad, 1713.
„ 4.	1126	=1713

Of these No. 3, being heavily marked by Sir John Duckworth's 32-pounders in 1807, interested me, at the moment, the most. Its weight was about $16\frac{1}{2}$ tons. It discharged a shot of 613 lbs. with a charge of 55 lbs. of powder. As Constantinople fell in May, 1453, even the oldest of these mighty cannon cannot have been employed in the siege, but belong to the epoch of Mahomedan conquest, and was probably the identical gun mentioned by Gibbon as brought with prodigious difficulty from Adrianople. At any rate it had an historical interest, which in any country in Europe but Turkey would have saved it from destruction. The Turks have, however, since my visit melted them all down except No. 2 of 1464, and the preservation of this one, which is now in our possession, involves a somewhat curious history.

During my stay at the Dardanelles I asked Mr. Calvert to try to ascertain whether it would be possible to secure one of the great cannon for its historical interest. He did nothing at the time, but being in England in the autumn of 1856, I again called his attention to the subject, and on his return to Constantinople he managed to interest Lord Stratford de Redcliffe in it. On February 9th, 1857, the Foreign Office forwarded to the War Office a despatch from him, in which he said: "Understanding that H.M. Government, or at least the War Department, is desirous of procuring a memorial gun from the Turkish arsenal, I have the satisfaction to report that Fethi Ahmed Pasha, Master of the Artillery, has kindly consented to my request, and, with the sanction of the Porte, to place at my

disposal a highly-ornamented piece of brass ordnance, 16 feet long, and appearing from the Turkish inscriptions to have been cast about 200 years ago. A carriage was being made for it."

This communication was referred to me, and in a minute dated February 12th addressed to Sir Benjamin Hawes, I recounted what had led to it, pointing out, however, that a mistake had been made, as the gun sent was not one of the ancient guns from the Dardanelles, of which I proceeded to give some account.

Lord Panmure minuted, "Accept this gun with many thanks. I'll write privately to Lord Stratford about an old gun if this minute is returned to me."

If Lord Panmure did so write, nothing came of it at the time.

The gun actually presented was brought home by Captain H. Eardley-Wilmott, R.N., in H.M.S. *Sphinx*, and was landed at Portsmouth on May 1st, 1857. The Queen was expected on May 7th, but Her Majesty did not give any directions before July 7th, when she ordered it to be sent to the Tower, where it still is. (The date of the gun is 1660.)

I never, however, abandoned the hope of securing the gun originally in view, and as there are few acts of my official life to which I look back with greater satisfaction, I subjoin in some detail the particulars of this second negotiation.

Copy of a minute addressed to Major-General St. George, Director of Ordnance, January 30th, 1866.

"DIRECTOR OF ORDNANCE.

"The Turkish Government, as you are aware, are about to substitute powerful modern guns for the ancient pieces of bronze ordnance which have so long guarded the Dardanelles. I have reason to believe that if the Government is willing to authorize the firm supplying the new armament to take one of the old guns in part payment, at the price of old metal, it can be arranged.

"You will find a description of them in Mallet's book, p. 190,¹ and also in the "Proceedings R.A. Institution," Vol. II. p. 18. If not the identical guns, they are of the same age and class as those described by Gibbon as used by the Turks in the conquest of the Eastern Empire, and bear dates, A.D. 1454, 1464, and so forth. One of these is 25 inches in calibre, made in two parts screwed together. They are the guns which nearly demolished Sir John Duckworth's squadron in 1807, and whose gigantic stone balls are still to be seen at the Tower.

¹ "On the Construction of Artillery," 1856.

“ I submit that their mechanical and historical interest warrants the purchase of one of them as old metal. Its value will be about £1.200, but there are many thousand pounds worth of old bronze guns not melted down, and by delivering an equivalent weight of these to the foundry it will simply be an exchange of stock from one form to another.

“ The enclosed non-official letter will show that I speak from good authority.

(Signed) “ J. H. LEFROY.”

Then follow eleven departmental minutes, ending in Lord de Grey's report that the course proposed could not be taken, because of an explicit Treasury order of May, 1848, that the proceeds of the sale of all old stores must be paid into the Exchequer. He, however, authorized provision to be made for the purchase of the gun in the Estimates of 1866-67.

In June, 1866, however, another opportunity occurred in connection with the purchase of some ancient armour out of the Castle of Rhodes, and I suggested that the gun might be acquired in a different way, namely, by giving over to the Turks a couple of Armstrong guns, a 10-inch and an 8-inch, rifled on the shunt principle, which had been ordered for an experimental purpose, *mero-motu*, by Earl de Grey, and were no longer required. They were of no pattern that could be issued, although in themselves serviceable.

Lord Hartington approved of this, and a letter was written to the Foreign Office.

Lord Lyons wrote on the 18th December that the Sultan had given his consent, and Captain Commerell, R.N., was ordered to proceed to the Dardanelles to embark the gun, a thing not accomplished without considerable difficulty, for they had to unscrew the two parts. It reached the Rotunda (in Woolwich) in April, 1868, more than eleven years after the subject was first started. But for my continuance in office, it never would have got there at all. Three months' delay was, however, caused by the insurrection in Crete in 1868, which made the Admiralty suspend the order to ship Armstrong's guns (being material of war) for fear of diplomatic complications.

It gave me great pleasure to meet the Astronomer-Royal and two of his sons, a few mornings after the arrival of the gun, driving in to see it. It attracted very little notice in the garrison of Woolwich or elsewhere for some time, except from one or two antiquaries like Albert Way, but it is now fully appreciated.

I return from this digression to my journal.

I left the Dardanelles on December 5th and next day touched at Abydos, where we had a Convalescent Hospital. The French also had a Convalescent Hospital, and I called upon the *officier d'administration comptable*, M. Moly, who was so courteous that on my return on board I sent him off a dozen of ale, at a cost on board of thirteen shillings, which produced on his part a very liberal return in the shape of fresh-baked bread, enough for all the mess.

I landed at Scutari the same day, and had the happiness of finding a large mail from England, full of happy accounts of my children.

I had the pleasure of meeting Miss Florence Nightingale¹ soon after landing. She had been for thirteen months the nominal head of the entire female staff of all the hospitals, and had recently returned "from the Front"; but her real influence was very far short of absolute authority.

I found her a young-looking person, tall and slight, her face full, with a good deal of colour; complexion very good; hair, dark brown, cut very short in front and brushed back. She wore a little closely-fitting cap; her forehead was not high but broad, increasing in breadth upwards; eyes rather small than the contrary, the upper lids full. I called it a mathematical eye, and as she had actually studied mathematics under no less eminent a teacher than Professor Sylvester, she probably had acquired the introspective, meditative look which musicians and mathematicians often wear. Her expression was agreeable, her features very mobile, her countenance lighted up in conversation. She was sometimes hasty, but always came round to reason. Her manner was a little stiff at first, but we became excellent friends, as I warmly sympathised with her in many of her trials, and was able to render her assistance. She ultimately treated me with great confidence and expressed herself in very grateful terms.

Lady —, whose influence had been paramount down to her arrival, was exceedingly jealous of her, and gave her countenance and support to an ultra-evangelical faction. On the other hand, a Roman Catholic section set her at defiance, and Dr. —, the P. M. O. in the Crimea, favoured, as she believed, everybody and everything that was antagonistic to her, from rooted aversion to female interference.

Storks, whose imperturbable good humour, firmness, tact and judgment I never ceased to admire, on the whole supported her. He

¹ She landed November 4th. 1854, with thirty-seven nurses.

had his own difficulties with Lady —, who wished to have a finger in every pie. One day he showed me a note from her cautioning him not to turn the General Hospital into an hotel !—because he had offered a temporary shelter to two of the ladies from Smyrna.

A story he told of Miss Nightingale illustrates her strength of character. Some nuns at Kulali suddenly announced their intention of transferring their services to the Crimea. If her position had been properly established they could not have obtained passages without her authority ; as it was, they managed to do so. But she was equal to the occasion. She also appeared on board, and mildly expressed her regret that they could not be dissuaded from going ; but such being the case she had decided to conduct them herself !

It is certain that we had a very bad reputation with our allies. I fell in with a curious little book in Paris in 1858, entitled “*Lettres d'un Zouave.*” They were genuine letters which fell into the hands of the Duc de Mortemert, who printed them in 1856. The Zouave wrote thus to his brother :—

“*Les Anglois sont pas bein nombreux, parce que le climat de la Crimée est pas sain pour eux ; il tombe malade facilement, je crois que c'est le ‘brandy,’ autrement dit le cognac, qui en est la cause. Cette hiver il se grasais, il couchais dehors, le leu demain au les trouver raide morte. Ils ont qui set à la bouche. Francis ! bonne brandy, . . . c'est leur Dieu.*”

I saw many cases in the hospital of terrible frostbites got in this way.

I had a long conversation with Miss Nightingale on December 6th ; she remarked forcibly on the want of men at the head of the army, capable of appreciating the value of moral influences. “If the officers would but exert themselves, much might be done.” I said that there were many in the Artillery disposed to do so. She agreed, and added, “the Guards and 39th.” I added, “the Rifles.”

We agreed as to the want of much greater facilities for remitting money home. I suggested Postal Cheques, payable at sight ; there were no money orders procurable.

She thought one nurse to 300 beds quite enough. They were only wanted to look after the more serious cases, and to do a little extra cooking occasionally.

Dr. — had allowed thirteen Irish nurses to establish themselves in the General Hospital at Balaclava, where there were only about 200 sick. But he was taken in ; he had only expected three

or four. She had a poor opinion of nuns as nurses. They were very wasteful and unmanageable. . . .

These Irish nurses were not of a good class socially, or well-affected to the Government. They were very troublesome in their resistance to lay control, and she wished to get rid of half of them.

Friday, December 7th.—Dined with Captain H. S. Thomas, R.H.A., meeting Captain Ruck Keane, Stirling, and Dr. Parkes. They complained of the absurdity of the system under which medals were given. Possession of one was no proof of any service at all. Mrs. —, wife of a cavalry officer, tried very hard to get one, and Lord Raglan at last yielded so far as to say she should have one if the general commanding the cavalry (Colonel Parlbly at the moment) applied for her. Fortunately he was a firm man, and positively refused.

Saturday, December 8th.—I visited Stamboul with Mr. Dickson (Storks' dragoman). I had particular pleasure in discovering in the Mosque of St. Sophia one Christian emblem which had escaped (doubtless because the Mahomedan conquerors did not recognize it) the destruction they meted out to all crosses and Christian monograms. This was the ΙΧΘΥΣ, or fish, of which several examples may be found still among the carvings of the beautiful marble screens in the triforium unmutilated.

We visited the At Meidan. The ancient monuments were still buried about four feet deep in the accumulated rubbish of centuries, all but the brazen tripod from Delphi, which was cleared, apparently to the bottom. Most unfortunately, Sir C. Newton, of the British Museum, who had cleared it, did not go deep enough by two or three inches, and a German savant who came afterwards found here the only inscription ; the prize of all the labour.¹

Sunday, December 9th.—I have already described my failure to find suitable winter quarters for the cavalry at Magnesia. It was decided to examine the Turkish Barracks at Ismid. General Sir J. Scarlett, accompanied by his staff, Captain Rosser, 10th Hussars, Captain Giveen, 10th, and Captain Slade, 1st Dragoon Guards, embarked this day for Ismid, and I went with them.

Our short voyage was very pleasant. We only stopped one day, and returned on the 11th. As at Magnesia, I carefully scheduled the accommodation, which was pretty good ; but nothing came of the inspection.

¹ See "Proceedings of the Society of Antiquaries," vol. ix. p. 39.

I found Sir J. Scarlett strongly in favour of retiring from the Crimea, and he would transfer the war to Georgia. After the destruction of Sebastopol he thought there was nothing more to be done there.

I find hereabouts in my note-book a quotation from a book which amused me much,—Lord Byron's poems done into French prose by Louis Barr (Paris, 1855).

“’Tis said that their last parting was pathetic,
 As partings often are, or ought to be,
 And their presentiment was quite prophetic
 That they should never more each other see.
 (A sort of morbid feeling, half poetic,
 Which I have known occur in two or three),
 When kneeling on the shore upon her sad knee
 He left this Adriatic Ariadne.”

“On disait que leur dernière séparation avait été fort pathétique, comme de telles scènes le sont fréquemment, ou doivent l'être. Et un présentiment fâcheux leur disait qu'ils ne se reverraient plus. Sorte d'impression à moitié morbide, à moitié poétique, dont j'ai vue deux ou trois exemples. C'est ainsi que Beppo laissa tristement agenouillée sur le rivage, cette Adriadne de l'Adriatique.”

December 11th.—We completed our inspection and returned to Scutari, where the next five days were fully occupied over the interminable details of this immense command. My desire was to go into everything and to be able to give a rational account of the way the money went.

On December 13th I visited the military prison, where there were at the time seventy-seven prisoners—capacity one hundred and two. They were hard worked, but well fed and well lodged. Many of them were sent down from the Crimea, including one Russian and several Germans. I saw a Greek lad get thirteen lashes for theft, not heavily laid on. General Storks had no express commission from the Sultan to exercise magisterial authority, but no objection was ever made to his doing so as a matter of military police. On the 16th a Greek got twenty lashes for selling spirits contrary to orders, and I saw a Turkish hammal get the same.

I had an interesting conversation with Miss Nightingale, who told me that the Queen intended to send her the Decoration of the Garter, and showed me a portrait of Her Majesty which she had received.

The difficulties and vexations of her position were immense. I was able on my return to get Lord Panmure to make it clearer. Down to this time there were ambiguities which enabled first one

female faction, then another to resist her authority. Some of the women were quite improper people to be employed at all ; one *lady*, well connected and enjoying the support of —, was convicted of embezzling public property to a considerable amount. It is useless now to repeat the scandals of that day ; never were the littlenesses of human nature more painfully displayed.

Friday, December 14th.—This day was devoted to the business of the Transports Department in Galata with Captain Powell, R.N. A storm set in which prevented my return, so I gave my spare time to the Army Telegraph Office at Pera under Captain Spurway, R.A. There was then a delicate question whether the Austrian and Prussian ambassadors were to be allowed, contrary to general orders, to send messages in cypher. Special sanction had been given by Lord Clarendon for one message on the 12th ; Spurway was doubtful whether he ought to send any more. I could not advise. The Austrian Count Colla was very angry at his hesitation.

Submarine telegraphy was still in its infancy. The line across the Black Sea, 325 miles, was only a single wire, in gutta-percha. They rarely exceeded five words a minute. On the Varna line, 120 miles, eight or nine words was the usual rate, but twelve or thirteen had been transmitted. The instrument used was a common Morse's key.

There was quite a large Artillery mess at Galata, where I dined ; eleven sat down. They were assessed at £6 a month, including wine and porter and breakfast.

The state of things I found on my return to Scutari explained any amount of Crimean misery. Two days' snow and sleet had sufficed to convert the cavalry camp into a sea of mud, in which horses and mules were lying dead or dying ; the men apparently too miserable in their tents to exert themselves. Nothing had been foreseen and nothing provided for. Fortunately a large proportion of the horses were in temporary stabling.

Saturday, December 15th.—I visited the hospital for women established by Dr. Blackwell as a private charity, Government doing very little. It had eight or ten patients, but could take twenty-two or even more. The expenses were about £5 a week. The women when convalescent earned money by washing. He had no settled plan or fixed rules, but simply used his discretion, and did all the good he could. He sometimes took in officers' wives, orphans and friendless women without resources.

He complained much of the neglect of schools, and of a hundred little things within the power of the military authorities, such, for instance, as numbering the houses and naming the streets.

The senior chaplain, Mr. Hadow, bore generous testimony to Dr. Blackwell's piety and earnestness. He also had a good word for "Sister Anna," a lady whom —— was backing against Miss Nightingale. Generally he thought the nuns and sisters the most devoted and useful of the female staff, and the last to be parted with ; the hired nurses were often worthless.

The chief Roman Catholic ladies were Mrs. Bridgman (Kinsale), Miss Stanley (pervert), Miss Salisbury (vert and pervert), and Miss Winifred Vyse or Wyse, niece of H.M. Minister at Athens.

December 16th.—I visited the Land Transport Camp and Haida Pashi, which were in a state of indescribable mud, especially the former. The Land Transport had lost fourteen ponies and mules within these two days of pitiless rain and sleet and wind ; there were the carcasses still, half buried in mud. A fortnight ago a commencement was made for hutting them, and about three days' work done, when the natives refused to work in such weather. I asked why the ground was not shifted, and was taken to a spot close by to which the animals had been moved two days before, as being the driest and best. It was now a sheet of mud, over the ankle, fluid enough to fill up our footsteps, stiff enough almost to draw off one's boots. The ground on which the tents were pitched, having been protected by them, was comparatively dry. It was the quantity of rain that fell, added to the clayey nature of the soil, that made the difficulty so tremendous ; carts constantly cutting the ground, and hundreds of men and horses trampling it.

Captain Ogilvie, an active young officer, was there, as the rain had ceased, moving his animals to the shelter of a hollow square of firewood in the commissariat wood-yard. He explained that if he had done so during the rain, they would have trampled the space into a sea of mud. There was no brushwood to be had.

Mr. Potgeiter, of the Commissariat, told me that his department was paying 50 to 60 piastres a day (7s. 4d. to 8s. 9d.) for an *araba* with two oxen and a driver, working from 7.30 A.M. to 4 P.M., but during the bad weather had to increase it to 70 or 80 piastres. A pair of buffaloes will draw 15 cwt., oxen only 10 or 12 cwt. Two regiments of cavalry were without long boots, because there were none in store, and demands from Varna could not be met. Storks say they have been egregiously wasted in the Crimea.

Scutari is surrounded by burial grounds, with their tall funereal cypresses, which extend from year to year, as the Turks never disturb graves. The tombstones are all much alike ; those of men being

distinguishable from those of women by a turban. Mr. Dickson, the dragoman, kindly translated two of the epitaphs.

I.

A.H. 1041 = A.D. 1630-7.

“He on whom Allah hath had compassion,
He also whom God hath forgiven,
Hawardje Michael, Son of Mahmoud and of Rohehoom.”
“May you recite a Fatihi” (the equivalent of a Paternoster).

II.

A.H. 1260.

“Muhamet Izet raised this stone to the memory of his friend and travelling companion, Kafik Effendi, who has passed to the other world; and has caused this epitaph to be written to his memory. May Allah have mercy on his soul!”

We happened in this walk to pass a Turkish guard-room just at sunset. It was extremely touching to see the soldiers turn out and (including the sentry) prostrate themselves for their evening prayer.

Monday, December 17th.—I embarked at 9.30 A.M. in the *Andes*, Captain McMahon, for Balaclava, and made the harbour about 4 P.M. next day. It was very rough, and we were unable to enter until the 20th; but I had a narrow escape on attempting to land. My luggage had been put into a boat, and I was in the act of stepping into it as it hung at the davits, when the stern sling gave way, and it hung perpendicularly by the fore sling; luckily my trunk slipped under the seats, and in due time all was hoisted in again. I had my trunk carried immediately down to my cabin, as it had been under water, but on opening it a bag of 200 sovereigns was nowhere to be found! Needless to say, I was in considerable distress, and on the point of confiding my loss to the captain, when I felt something under the lining, and it turned out that the bag had slipped into a hole there was, and got down to a corner.

Thursday, 20th.—Landed at Balaclava, and meeting some officers whom I knew, I was enabled to borrow a horse and to ride to headquarters, where I learnt that H.M. despatch vessel *Medina*, Captain Beresford, was to leave next day for Kertch, and I arranged to go in her. Meanwhile my friend Strange offered me a share of his hut. I dined with David Wood, who was famous for his hospitality, and met St. George, Reilly and Pat Strange; but before dinner had the great pleasure of visiting the Redan and the Malakoff with Strange. At the latter we were joined by the French officer on guard, and our three figures standing out sharp against the sky-line, tempted some

idle gunner on the north shore to fire a shot at us. The range was about 2,300 yards, and we saw the shell approach ; fortunately the fuse was short. It burst a long way short of us, but some of the splinters fell behind us and entitled us to say that we were under fire.

I had a long interview with Sir William Codrington, who next day put me in Orders, enjoining all heads of departments to meet my inquiries with the fullest communications ; but these were for the moment postponed.

I found it very cold. The thermometer that morning fell to 2° F., but my *grego* proved a capital wrap.

Friday, December 21st.—I embarked in the *Medina* in Kasatch Bay, but we did not sail till 2 A.M. It was blowing a gale, and intensely cold. I never felt more demoralised, and so, apparently, was the captain, for he sat in the cabin with me, hugging a small stove, and left his lieutenant to battle with the breeze, which was luckily off the shore. We got up to an anchorage at the mouth of the Sea of Azof, called Ak Bournee, on Sunday morning. Here finding that the *Medina*, a paddle-wheel steamer, could not possibly force her way through the ice, I transferred myself to the *Miranda*, Captain Hall, a more powerful vessel, that was also trying to get up to Fort Paul. She was two or three times brought up, but finally forced her way four or five miles (the ice was four to six inches thick), and we landed before noon on Christmas Day. Here I borrowed a battery horse of Wolffe, R.A., and rode on three miles to Kertch.

Kertch was at this time occupied by the Turkish contingents, under Sir R. Vivian, with the addition of a small force both of French and English (the 71st Regiment), chiefly stationed at Fort Paul. The artillery mustered one troop R.H.A., six batteries Field and two companies of Garrison Artillery, the whole under the command of Colonel Collingwood Dickson. Colonel J. Stokes commanded the R.E. The place was partly in ruins, the consequence of a wanton bombardment. Great magazines of forage and grain were burnt by Sir George Browne, and industrial establishments that would then have been of great use were destroyed. The Tartars of the neighbourhood made a wreck of everything they could in the short interval between the evacuation of the place by the Russians and its occupation by the allies. It was then that the famous museum was pillaged, but the Russians had previously removed the most costly objects.

I found General Vivian in a somewhat discontented frame of mind, particularly with Sir George Simpson, who would not have his troops at headquarters at any price, and finally sent them here after so

many contradictory orders that nothing could be prepared. They began to arrive on October 2nd, and by December 8th no less than 109 transports had arrived with troops, transport animals, live cattle, stores, huts, etc. It is good in time of peace to remember these large figures, which give an idea of the magnitude of the operations involved in foreign war, and of the ceaseless energy they demand.

Everybody spoke well of the Turkish soldiers. Many of the officers were making fair progress in the language. Vivian was wanting in activity, but had a very energetic, active brigadier in Mitchell. Dickson by no means admitted that there was any want of activity in attention to their duties in the officers generally. On the other hand, Captain Hall complained much of their apathy in such matters as landing stores or provisions, and not sufficiently co-operating with the sailors.

The position was not a strong one, being much too extensive to be properly defended, and water was scarce everywhere. There was no body of Russians of any consequence within six marches, but small patrols of Cossacks sometimes came within six or eight miles. A skirmish had occurred about twelve miles off between a squadron of eighty-three Turkish cavalry and a very much superior force of Cossacks. In this Captain Sherwood was killed. He had five lance wounds, but the Russians behaved like gentlemen; a flag of truce sent in found the body laid out in state, surrounded by lighted candles, and with priests watching it.

The vital defect of the Turkish contingent was the want of any machinery for keeping it efficient. It had no *dépôt* and no recruiting agency. The yield of the conscription for the whole Turkish army was only calculated to be 15,000 men, as they will not take Christians.

It was pleasant to hear that the Turkish officers and men were thoroughly contented with their position. Small as their pay was (20 piastres = 3s. a month), it was to them a new experience to get it regularly, and in full.

I found a Turkish band playing "God Save the Queen" before General Vivian's quarters, and a Tartar police keeping order. Their lubberly round faces and vacant looks, under very large round fur caps, gave them a singular appearance. The common wear was a long pelisse lined with sheepskin; a few turbans might be seen.

There seemed to be scarcely anything in the shops, though the Russian signboards gave pictorial promises. The market-place was in ruins.

I had no time to spare and after seeing what I could in a few

hours, and seeing everybody of consequence, I took my passage in H.M.S. *Banshee*, Lieut.-Commander Pike, and returned to Balaclava. But for the ice I should have had a day longer.

Tuesday, December 27th.—Arrived again at Balaclava about 9 A.M., and the first thing called on Admiral —, to inquire if there were any large chart or plan of the harbour. There was none. We had been there over a year, but never measured or surveyed it. He conveyed to me, as many others had done, the impression that he could not bear to admit the possibility of a prolonged stay, and shrank from measures of preparation for such an event.

He said that cargoes were still arriving of land transport materials, commissariat and ordnance stores, which there was literally no place to put away. He supposed they must be thrown away. Yet he would not listen to my suggestion to blast the soft rock and make room. It was completely in keeping with one of the stories I heard.

A staff officer hurried down to the harbour, and boarding a freight ship he found there, told the captain he must get up steam as fast as he could and take him to Constantinople on urgent secret service. I suppose he produced some authority, but that is a detail. The captain obeyed. When well out to sea the captain said to his passenger, "Do you mind telling me what's up?" "Well," said the other, "I suppose I may tell you now. Fact is, the army is almost barefooted; you wouldn't believe the state the men are in! I'm off to get boots somehow!" "God bless me!" said the captain, "why my ship is full of boots, and I have been lying six weeks in that hole trying to find some one to take them off my hands."¹ Such was the consequence of malorganization from the beginning; ignorance and inability to realize the facts at home; sending one invoice, or perhaps not sending one at all, when there were half a dozen people who should have been kept informed of the consignments; saving clerical labour at Woolwich or Somerset House at the cost of delay, demurrage, loss and confusion at the seat of war. Gordon (afterwards Sir W. H.) was full of complaints of the mismanagement at home, and after my return I was especially commissioned by Lord Panmure to investigate it, in relation to one particular complaint, namely, the delay in the shipment of huts, and the imperfect state in which they were sometimes found on arrival. Also that things of urgency were often found at the bottom of a cargo instead of being the first landed, which led me deep into the technicalities of stowing ships; but I will not go into that subject now.

¹ Probably in December, 1854.

After a visit to the Balaclava lines, I went over the Sardinian hospitals, and was pleased by their comfort, and especially by the kindly maternal look of the nurses. There were ladies of good family among them, *même des Comtesses* ! I was assured, *sœurs de charité*, thirteen of them in one hospital, six at another. They were regarded as officers ; their cheerful, healthy appearance was very attractive. I saw no young woman. These ladies did some of the cooking, and showed me their linen store with simple pride.

There was one doctor for sixty sick ; if necessary, a larger proportion for wounded. The army had lost 989 men, chiefly by cholera. As well as I could judge by pacing dimensions, the cubic space up to nine feet from the floor was a little below 500 feet per bed.

Then I visited the siege train office under Major Hawkins, formerly in my company ; the ordnance office, under D.G.A. Mr. Young, and the ordnance storekeeper's department, Captain W. H. Gordon. These three departments acted in great measure independently.

Then called on Mr. Campbell at the office of the *Chasseur* floating factory, and went over that vessel with him. She had been equipped at a great expense at Woolwich under direction of Mr. John Anderson, inspector of machinery, and was provided with all sorts of machinery for making and repairing army and navy material. . Down to this time she had chiefly worked for the navy, and it may be doubted whether the country ever got value for the outlay. But it was an energetic step.

December 28th—I was General Dacres' guest. He occupied a very comfortable hut with Mrs. Dacres, one of the very few ladies who had come on to the Crimea. (There should have been none allowed.)

With the exception of the blowing up of the docks, of which I saw one explosion on December 31st, I think the first of many, nothing of importance occurred during my stay of nine days, therefore I shall disregard a daily arrangement of entry. Upon that occasion eight charges of 160 lbs. in four pairs were exploded together. There was no very loud report, but the earth shook where we all stood at a safe distance ; and as the Russians must have known very well what brought a large assemblage of officers together at that point, I regarded as an instance of the chivalrous feeling with which great nations ought to conduct war, that they did not fire. I suppose they could have concentrated fifty guns and mortars easily enough, and their batteries were within 2,000 yards—but the only result would have been to kill and wound perhaps a dozen or two of staff and other officers, and in no degree to have checked the destruction.

I dined at headquarters in the evening, meeting only the personal staff and Count Litta, the Sardinian A.D.C. The conversation turned very much upon Kertch, and on the progress of the troops in rifle instruction.

The Crimean campaign was a field for experiments of all kinds ; among others was that of having a body of men called the Army-works Corps, not enlisted soldiers, but under a civil contract and managed by a civilian. They could not be punished for desertion, or required to work under fire. They expected to be carried on a march. Their high pay caused great discontent, especially in the R.E., *e.g.*, 40s. a week to a carpenter. It worked pretty well. They were chiefly punished by stoppages of pay, of which there were in three months 650 cases.

Men fined once	...	...	326 = 326
„ „ twice	...	...	178 = 356
„ „ three times	...	...	76 = 228
„ „ four times	...	...	10 = 40
			<hr/>
			590 950

The serious crimes from October 1st to December 31st :—

Drunk on duty	...	...	59
„ and disorderly	...	...	49
Habitual drunkenness	...	...	2
			<hr/>
			105
Insubordination	...	...	23
Sundry offences	...	...	23
			<hr/>
			46
			<hr/>
			151

These navvies had made about nine miles of macadamized road, which took eight weeks. There were about 200 of them, and the troops furnished working parties varying in strength from 1,500 to 8,500 on some occasions. Mr. Doyne's calculation was that the road cost £2,000 a mile, or about double what a similar road would have cost in England (including working pay). The metalling near Balaclava was as much as two feet thick, diminishing to nine inches. The ditches were much destroyed by careless driving.

I called on Dr. Hall, who bore strong testimony to the value of the Roman Catholic ladies, and said they cost less than the Protestants. He disclaimed all idea of annoying Miss Nightingale. He bitterly

regretted his indiscreet and apparently unfeeling order at the landing of the army, to the effect that surgeons were not to mind cries of pain ; said it was issued under excitement. He was very sore about the advantages enjoyed by the civilian doctors ; was altogether against a spirit ration ; would substitute tea or coffee. He thought the cork mattresses the best things ever issued. He protested against expecting the army to operate in the field without tents.

General Dacres was the only one who, of his own sense of justice, included four medical officers in his recommendations for the Legion of Honour. Codrington called on the other generals to revise their lists in consequence.

I went round the Camp General Hospital, and the Hospitals of the 3rd Division. In point of cleanliness and comfort they left nothing to be wished. There were some French wounded in our hospitals, and the difficulty was to get rid of these poor fellows. They were loth to go out, and when convalescent would find their way back and beg for food. A suspicion prevailed that all the French troops at this time were on short allowance. I saw some extraordinary wounds. One man with a part of his skull gone.

At Monantery General Hospital I found Miss Weare. There were seventy-two patients. Dr. Jamieson said there were three other so-called nurses, who did everything feminine *but* nurse—chiefly the cooking of extras. He spoke very favourably of them, but for attendance on the sick preferred ward-masters and orderlies. There were many cases of ophthalmia, especially in the 56th and 97th Regiments.

Dr. Hall felt the obloquy cast upon him by the Press very deeply, and protested against the injustice of it. He said that he had no official notice that the army was to winter in the Crimea last year. He had protested in vain against leaving hospital transport behind. As an illustration of the contemptuous disregard of his office of Principal Medical Officer by the Superior Staff, he said that soon after the arrival of the army at the south, he contended strongly for the establishment of the chief hospitals at the village of Karani. He was refused. The commissariat mules were preferred to the sick and wounded ! After all, the mules died.

Dr. Hall, Dr. Elliott, Sir R. Dacres, Herbert the Quartermaster-General, everybody in short to whom I spoke on the subject, exclaimed against the waste of hospital comforts, clothing, etc. The men are unreasonable and reckless ; the medical officers make a merit of extravagance, and are perpetually looking away from their superiors

to the Press or something else exterior to their profession. Dr. Hall related how he was once sent for on a Saturday afternoon, and told that the French had offered conveyance on Monday for 1,100 sick. He was to let the hospitals know at once. It was utterly impossible to complete the necessary arrangements. On another occasion he had only twelve hours' notice to send down 700 sick and wounded for embarkation. Hence the want of needful documents and much preventable suffering to the men, for which he often got the blame.

In the course of our ride we came upon a forlorn spectacle in the shape of a dromedary anchored to the spot on which he stood in the snow, by his load, which had slipped round under his belly. We tried to free him from the load, but the beast spit and bit so viciously that we had to desist. He was French property, and probably they would send a party out to recover him.

Saturday, December 31st.—I breakfasted with Colonel Percy Herbert, Q.M.G., with whom I afterwards rode out, and it was mostly by a piece of good fortune that we heard of the intended blowing up of the docks in time to be present. He had not been officially informed. In fact, his office had been much overshadowed by the newly-created Chief of the Staff.

He showed me a letter ordering eight sergeants and 200 men to be detailed from each Division to take over Land Transport duties : to be ultimately increased to twenty sergeants and 500 men. Although such an arrangement peculiarly belonged to his department, he had not been consulted, and was not responsible for the unfortunate wording "*Subalterns who may have a taste for this kind of duty*" to be invited to volunteer.

I went over the Quartermaster-General's office. Both the Q.M.G. and the Royal Engineers were compiling maps of the position, an apparent waste of labour. He complained of the lamentably inadequate provision of maps for the staff ; and also of the want of good tactical books like the French "*Tactique des Trois Armes.*"

He pointed out the evils of so much public criticism. Each department thought more of securing itself from censure than of the public interests. Hence extravagant and absurd demands and attempts, if they were refused, to shift all responsibility and exercise of discretion to the Commander-in-Chief or to the staff.

He agreed with almost everybody, including the Commander-in-Chief and the superior medical officers (Bouchier, R.E., did not agree), that it was a mistake to send out ready-made huts. It would have been better and incomparably cheaper and more expeditious to have

sent out the boards and scantling in convenient lengths, with a sufficiency of nails, hammers, hinges and so on, for the troops to hut themselves. Owing sometimes to original mistakes at Woolwich or the Tower, often to transhipments at Gibraltar or Constantinople, the huts sometimes arrived incomplete, and wild confusion reigned at the wharves. Keane, R.E., had nine ships discharging all at once at the Diamond Wharf.

I will conclude this year with the totals of a return of strength on December 30th, 1855.

Rank and file, Sergeants, Drummers	...	58,910
Field Officers	... ..	188
Captains	... ..	576
Subalterns	... ..	945
Superior Officers and Staff	... ..	452
Grand total		61,071

64,000 daily rations were issued, and 18,000 rations of forage. These figures do not include our Foreign Legions.

Of the German Legions quartered at Kulali, two regiments had embarked; two regiments were nearly ready in November; two regiments were to be ready by January, 1856, each 1,000 men and forty officers.

Having in pages which follow made repeated reference to hutting the troops, I will here insert some particulars I gleaned from official papers after my return. Never that I know of since classical times has an enemy sat for more than a year and a half,¹ including two rigorous winters, before any fortress, and never was such a gigantic effort made, as to place such an army in an enemy's country, nearly 4,000 miles from home, in conditions of shelter, with no aid from local resources.

On the 3rd and 4th August Sir George Simpson, clearly foreseeing the probability of another winter before Sebastopol, demanded by telegraph—

Hutting for officers	...	1,890 + 748
„ N.C. officers and men	...	54,208 + 1,792
„ hospitals	...	5,500—910
„ horses	...	22,810—all.

The second column shows that in the first two items the orders exceeded the demand. For the sick it was rather under the demand. For horses it was refused.

¹ September 27th, 1854, to July 12th, 1856.

Besides this ten huts were ordered for commissariat officers and four of 70 feet by 20 feet, and twelve of 40 feet by 20 feet for commissariat stores. An immense quantity of material for hutting was ordered on the 22nd August of a contractor, Price of Gloucester, viz. :—

Scantling, 4 by 3	...	...	230,000 feet.
„ 4 by 2	...	...	373,000 „
1 inch board	...	...	556,000 feet super.

	Officers.	Men.	Sick.
The War Department undertook for	1,000	30,000	1,200
The contractors at Gloucester	... 600	10,000	960
Names not legible	... 748	16,000	2,500
The total cost amounted to £221,968 19s. 8d., and the freights to £30,803 14s. 2d.			

Langman's tender was £2 19s. 4d. per man. Isaac's at £3 12s. 2d.

The first reckoned the weight at 63 lbs. per man, cubic space 100 feet. The second 162 lbs. per man and 140 cubic feet.

Thus many things had to be considered. Doubtless much more ample proof of the exertions of the Government might be produced from Blue Books, which I have not at hand, but the above figures are significant.

The scales of the Artillery operations is best illustrated by the subjoined table of guns in battery and rounds appended in each bombardment, not counting among the latter those fired nightly in the common course of events.

Bombardment.	Guns.		Rounds.		Naval Brigade.
17th October, 1854	72	...	21,881	...	16 guns
9th April, 1855	... 123	...	30,633	...	49 „
6th June, „	... 154	...	32,883	...	—
17th June, „	... 166	...	22,684	...	56 „
17th August, 1855	... 196	...	26,270	...	—
8th September, 1855	207	...	28,476	...	49 „

The lavish expenditure of money will be illustrated when I come to the provisions and the waste of stores. Never was Bacon's remark that "Money is not the sinews of war, as is often trivially said" better exemplified. The "sinews of men's arms" never were wanting; what was wanting was strength of will, power of brain, and experience to guide and control it all.

CHAPTER XIII.

Thursday, January 1st, I passed mostly at the ordnance stores in Balaclava with Captain W. H. Gordon.

January 2nd.—Breakfasted with Colonel C. Morris, R.A., a shipmate of my voyage to Quebec twelve years before, now the British Commissioner at the French headquarters. He had a great collection of relics and trophies of the war.

Afterwards, to some of the Artillery camps. Major E. Mowbray's stables were an example of what could be done by energy and example, chiefly of his subalterns, Ravenhill and Tweedie. These stables were paved, as were those of Vesey and Connell, by the men themselves.

The 18-pounder battery was, I think, not horsed, *i.e.*, both 18-pounder guns and 32-pounder howitzers were, at the date of the battle, in charge of the same officer, with men and horses for one or other, but not for both. Hence Major Ward's mortification to be ordered, against his own judgment, to bring up the less powerful of the two; being pertinacious, he was positively *forbidden* to bring up his 18-pounders. (Ward).

The hutting of the troops depended very much upon the activity and vigour of the individual filling the office of Assistant Quartermaster-General. Officers were named whose supineness kept their divisions much behindhand. Of this class was —, who was reported to have observed, "I can hut the Artillery sitting in this chair." (He was among the last.)

I have already remarked on the transhipment. In transferring the freight of the *Omar Pasha* to the *Inez*, the ironwork of thirty-five huts was left out. The *Victoria* was delayed to tranship at the Bosphorus; the huts were urgently wanted; it was found that the other vessel would not hold all her freight, so she was sent on half empty, and the other vessel followed half full (Q.M.G.). The *Vivid* came out with huts leaving all their ironwork behind.

One of the novelties of equipment I saw at Captain Ward's battery was a sort of travelling mill, known as "Swinton's Cart," for grinding barley for horses. Four men could grind five hundred-weight in two hours = forty rations of 14 lbs. But 14 lbs. was

unnecessarily large ; he thought 12 lbs. quite enough, with 16 lbs. hay. Multiply the difference by 18,000 and it will be seen that it is not trifling. I do not, however, mean to imply that all the animals foraged got a full ration.

A fancy of Lord Hardinge's was for the Irish jaunting car, and through his influence a considerable number were sent out as hospital conveyances—I believe two hundred. A greater error of judgment it would be difficult to produce, for they are particularly unsuited for the conveyance of sick or wounded men. But the crowning absurdity was fitting each car with a tray, divided into neat square compartments, to receive medicine bottles, surgical necessaries, and such-like, but to send them empty, no bottles to fit them. The springs were so weak that the seats were pressed down on the wheels, and in some instances cut through. (Major C. H. Henry.)

Henry, who had himself lost an arm, preferred the mule litters to any other conveyance. He remarked that there was no possibility of avoiding great suffering in the removal of the wounded ; but that the old ambulance men seemed to have no humanity left in them. He never witnessed such callous brutality as theirs.

I afterwards visited the General Hospital ; beds, 240, sick, 203 (Dr. Handley). It took in camp followers and outsiders of all sorts. I saw Mrs. Branbridge and four nuns. There were then four purveyors and seventeen purveyor's clerks, against one purveyor and four clerks the year before.

Also the Castle Hospital (Dr. Matthews), 540 beds. Dr. M. spoke in strong terms against female nursing. He insisted upon its objectionable character, the misconduct of many of the women, their foolish interferences in what was the doctor's business. At the same time he said he knew that he was doing himself an injury by taking that line. I assured him that he was not. He was one of the ablest surgeons in the army, and his hospital remarkable for successful treatment. There were only four surgeons, four assistant surgeons, four dressers, one dispenser, and one purveyor for 540 beds (and 54 orderlies). He said it was a sufficiently large establishment ; other doctors did not think so.

Many interesting questions arose after the capture of the south side ; one of which was whether the enormous number of guns in bronze and iron which fell into the hands of the allies were to be regarded as trophies of war and shared equally, or only as prizes of war and shared rateably. General Dacres privately consulted me. I said very decidedly that they were not trophies in any proper sense of that word, and so it was ruled : and Lord Panmure egregiously

erred, against my strong remonstrance, when he distributed them broadcast over the country for a momentary clap-trap.

Another question was what to do with vast quantities of gunpowder that was not wanted. Strange suggested to try and blow up Fort Constantine with it, and, without knowing of this prior recommendation, I suggested that full notice should be given to the Russians that they might withdraw their troops, and a similar use be made of the Russian powder. It was not done, and I do not know what became of it.

The mention of Fort Constantine recalls a story very generally believed at that time, viz., that the Russians fully expected some renewed attempts to be made against it after the successful assault on the south side, and withdrew from it. A soldier of Captain Halliday's company, 28th Regiment, on the night of the 9th September, wandered in quest of booty into Sebastopol, dodging the French sentries. He was half-drunk, and meeting another man they found their way down to the boathouse, launched a boat and pulled over to Fort Constantine, which they supposed to be in our possession. They entered it, wondering that they found no sentries, and wandered about finding no one, until they noticed some men on the heights, and made out that they were Russians, whereupon they were seized with a panic and took to their boat again.

In the distribution of property captured, the French Commissioners fully recognized, as an ancient custom of war, that the bells in a captured fortress belonged to the commanding engineer of the victorious army, and the damaged bronze guns to the commander of the artillery; Dacres made a claim, but it was not allowed.

One of my fellow passengers back had something heavy, remarkably like a bell, done up in canvas. He said it was a cheese!

One of the heads of departments I interviewed was Colonel (now Sir Montague) McMurdo, who had succeeded Colonel Whetherall as chief of the Land Transport—6,000 out of 9,000 animals were then huttet. It was no fault of his that they were not under cover sooner. He requisitioned for material in July. It was shipped in sailing vessels in October. They arrived about 18th December. Being only scantling and plank, they might under commercial conditions have been shipped in a fortnight. 307 animals had died in the last week; there were 1,000 disabled by sore backs, and 545 sick from other causes. He expected the total loss in twelve months to reach 10,000.

He said it was heartbreaking to see horses picketed in the open, gnawing each other's tails in their craving and emptiness (a literal

fact), and then to see a ration of chopped straw thrown down before them and instantly blown away.

This abominable chopped straw was answerable for much. It was very expensive, £20 a ton, whereas hay could be got for £13 (Assistant Commissary G. Prinseps), and could not be fed in the open air. Deputy Commissary G. Smith told me he had recommended the locust bean (Caroba), but his superiors did not take up the proposal.

Deputy-Assistant Commissary General James Murray, who had been with the cavalry from the beginning, assured me that Lord Cardigan preferred letting his horses die of starvation to degrading them by making them fetch their own forage. He was with Lord Lucan¹ when he got orders to send horses to bring up biscuit for the infantry, which was half starved. He stormed and swore he would do no such thing, but at last he did it: and how? He sent out a dragoon on a horse, leading another horse, which carried one bag of biscuit. One dragoon and two horses to carry half the load of a native pony!

The same officer gave me some further illustrations of the cavalry generals of that day, men who had sometimes given £8,000 to £10,000 for their regiment. In August, 1854, it was his duty to go from Varna to Devna with large sums of money to make purchases, along a road famous for brigandage; on some occasion he applied to Lord Lucan for an escort. He gave three dragoons, but would not hear of their going in light marching order. As it was sixteen miles there, and the same in returning, he was obliged to ride pretty fast, and the dragoon horses were knocked up. Lord Lucan was furious, inquired what he meant by taking dragoons out of a trot, and vowed he should never have an escort again. He never had (until Thomas, R.H.A., gave him one), except his own servant and two natives, themselves as likely as anybody to shoot him.

The ordnance stores at Balaclava, about which I have as yet said nothing, were in charge of Captain W. H. Gordon, 42nd Regiment (afterwards Sir W. H. Gordon, principal military store-keeper of Woolwich Arsenal for many years); a man of amazing energy, strength of will and independence of character, like his brother of Khartoum renown. He had reduced the chaos he found into a surprising degree of order; but he could not stop the sources of it. If the whole object of the authorities at home (meaning chiefly those concerned in supply and shipment) had been to secure the greatest

¹ My note has Lord R., but I think it must be a clerical error.

possible degree of confusion and waste, they could not, he declared, have managed it better than they had. He was emphatic that it was necessary to review the entire stock of stores at Woolwich and the Tower, on the Bosphorus and in the Crimea, to compare them with the quantities in possession of the troops and their probable demands, and to arrest unexecuted orders for shipment and contracts for supply. He had received 15,963 pea jackets for mounted men since December 1st, and there was a large store at Malta. Every cavalry soldier was already supplied.

Three thousand sealskin boots received last year and sent back, unissued, to Malta, had turned up again, undemanded. Also officers' fur caps, 6,000, and overcoats, 12,859. He was expecting the arrival of blankets, 10,000 ; rugs, 30,000, according to a War Office letter (Mr. Godley's) of 3rd October. There were actually, in the Crimea, blankets, 45,622, and at Malta, 39,927, and rugs, 23,990. He was advised of 65,000 barrack palliasses and 53,000 bolster cases. Of the latter there were already in reserve at Malta 11,913.

Now, it takes twenty-eight pounds of straw to fill a palliasse, and two pounds to fill a bolster, or thirty pounds of straw for one bed. One issue of 60,000 would have required about 8,000 tons of straw.

Horse-clothing being much wanted in the winter of 1854-55, 20,000 coloured blankets were sent out, but it was not explained what they were intended for, and, as no Department "demanded" coloured blankets, they remained unissued until October, 1855, when, the cavalry pressing for horse-clothing, it was thought that these coloured blankets would do.

It was not until December, 1855, that Gordon discovered that they were all along intended for this purpose.

A case of unknown little square tubes, with glasses in them, was received during the progress of the siege. Nobody knew what they were for, and nobody "demanded" them. They were left unissued. It was not until I took one to Sir W. Codrington and explained its uses, that the Staff knew that these little tubes enabled an officer to look over a parapet and watch the enemy's movements without exposing himself ! Everybody was delighted with them ; but it was then too late to make any use of these ingenious reflectors. Some were merely plain mirrors ; some had telescopic powers.

There was one cavalry regiment which wore cherry-coloured overalls. Every soldier was supplied, and there were never more than about 300 of them. Gordon had in his store 1,000 of these cherry-coloured articles.

Notwithstanding every endeavour to stop it, cases of unmanageable weight and dimensions continued to be shipped; some of them as much as six hundredweights.

During the progress of road-making in August, 1855, 15,000 stone hammers were asked for. Some wiseacre at home refused to sanction such an unheard-of demand. Obligated to get them, 7,000 were ordered at Constantinople at 4s. 2d. a-piece. After all, the English supply was despatched—to arrive when not wanted.

The bulk of the stores of the Commissary of Ordnance had never been landed for want of room. They were afloat in the transport *Star of the South*, which had then been doing the duty of a mere hulk fourteen months, with her full complement of men. The *Gertrude*, specially fitted up as a magazine ship, had been lying nine months at Kasaleh, also with all her crew. Gordon thought it probable that the sum paid for wages would have purchased these vessels.

The scale of sizes for boots supplied for the troops was quite fanciful, and did not fit the demands. If I remember right, there were far too many of the largest size—in consequence a great waste of them.

He was about to send back to Scutari 350,000 sandbags.

The *Tasmania*, a sailing vessel, which had taken home invalids, arrived at Balaclava on 5th January. The captain quietly remarked that every invalid sent home in her had cost £300.

The same Captain Greene had been sent some time before, in the *Bahiana*, to Barcelona for mules. Each mule cost in ship's time alone £71.

Admiral Grey remarked to me that the *Tasmania* was a most costly and useless vessel. The fact was that, nearly two years after the war had commenced, it was only dimly discovered how much more costly some vessels were than others, and the costly ones were not discarded. With the assistance of Captain Powell, R.N., the Director of Naval Transport at Constantinople, I compiled a table exhibiting this. The ships which gave the best value for their cost were screw colliers.

As to the "free gifts" to the army, possibly welcome in 1854–55, Gordon had a store full of them in 1855–56, and nobody would take them. Part of them were mere rubbish.

Perhaps no class of army stores were supplied in more lavish excess in 1855 than medical stores. Sir Andrew Smith seemed to lose all sense of proportion, going from the extreme of niggardliness

to that of prodigality at a bound. I found in the apothecaries' store at Balaclava, in addition to large supplies at all the hospitals¹ :—

	lbs.	ozs.	lbs.	ozs.
Quinine ... ..	...	...	1503	0
Blue Pill ... ..	...	...	140	13
Crude opium	95	8	2283	10
Powdered opium	928	4		
Pulv. cret. cum. op.	722	13		
Tincture of	1537	1		
Chloroform ... ..	...	...	486	1
Morphia acetate... ..	11	13 $\frac{1}{4}$	26	8 $\frac{1}{2}$
„ muriate	14	15 $\frac{1}{4}$		
Lint ... ..	...	...	6744	0

Morphia was very expensive, very seldom used, and then in $\frac{1}{4}$ -grain doses. If my memory is correct, I found eighty-four pounds of it altogether. I compiled an aggregate return, but cannot now refer to it.

Of port wine thirty-six pipes had been ordered from Oporto in December, 1854. Of these thirty, of about seventy-two gallons each, were still on hand. It was excellent wine, at about 17*s.* 6*d.* a dozen.

The quantity of champagne at Constantinople was also excessive ; in fact, I could very much extend these examples if I had access to the voluminous returns I collected at the time, and partly collated.

Rich as England is, she is not rich enough to let her wealth run through such a sieve as it was then put into. The moral is, “ With good advice make war.” Man your administrative departments with people of some knowledge and experience in great affairs, and try to infuse into the subordinate members, even in the least distinguished offices, a sentiment of duty and pride in their work, which was very far from being generally shown in some branches of the Civil Service at that time.

As a vessel left Balaclava for Scutari every Saturday, I went on Friday, the 4th, to headquarters, to give an account of what I had been doing to the Commander-in-Chief. I was not directed to do so, but it was obviously proper.

Sir William Codrington received me in the most friendly manner, and we discussed the many subjects on which it would be my duty to report to Lord Panmure on my return to England. As they none of them concerned the military conduct of the war, but on the contrary those departments which were very little under the control of the

¹ Medicines were shipped direct from the Apothecaries' Hall, and were of the best quality. Professor Miller reported on them in 1856.

Commander-in-Chief, he had the good sense to feel no annoyance at all at my rather anomalous position. He was very warmly in favour of rifled guns.

The telegraphic arrangements were at that time imperfect, but he thought, what everybody wanted, a through-telegraph impracticable. He was much in want of an easy (*i.e.*, simple and safe) cypher, and wished me to inquire about one by Mr. Penn.

He remarked on the great want of light balls during the siege. Boxer's parachutes, which were not sent out, would have been invaluable. He pointed out, as others had done (*e.g.* Keane, R.E.), the insufficient supply of percussion caps. Ammunition was drawn merely for the caps; the cartridges wasted.

Medical officers who in the course of duty had been under fire, *e.g.*, Drs. Taylor and Sylvester, of the Ordnance Medical Department, had been recommended for the Legion of Honour. He thought it should not be given when the exposure was voluntary. Medical officers, however, shared fully the fatigue and privation and many of the risks of the campaign, and I found a very sore feeling among them at their general exclusion from this coveted distinction and from the Turkish Medjidie, which the French doctors got.

Saturday, January 5th.—I took farewell of my friends, and embarked at 1 P.M. on board the steamer *Bahiana*. We started about 3 P.M. Among the passengers were the Chaplain General, Mr. Wright, Sir D. Macgregor, R.N., Lord Carrick, Grenadier Guards, Captain Mead, Captain Gamble, and one surgeon's wife. We had a delightful passage, and anchored in the Bosphorus before 10 A.M. on Monday, 7th.

Tuesday, January 8th.—Saw a parade of the 1st Regiment of the German Legions at Kulali (Light Infantry). They mustered 873 rank and file. M. General Wooldridge, who commanded the brigade, expected soon to have a force of 4,000 men. I had some conversation with Captain Rostrecki, of the Polish Legion, who expressed the general desire of his countrymen to join it.

Wednesday, January 9th.—With Miss Nightingale. Afterwards rode to the cavalry camp and the lighthouse—a lovely spot. Someone told me the story of the female medical officer, known as Dr. Barry, then at Corfu. I had heard it already at St. Helena, where he, or rather she, had recently been, and as Lord Albemarle has related part of her story, and the *Lancet* of 1876 gave other particulars, I need not repeat it. Doctor Grant, P.M.O. at Bermuda, had known her.

Thursday, January 10th.—The military police, under Storks' directions, made a great razzia upon the illicit spirit dealers and receivers of stolen property in Scutari. They made a great capture of the latter, and poured out quantities of bad spirits. Two Armenians got each two dozen lashes and eight others got one dozen each. Their lies and excuses, which were ingenious, were of no avail. An illegal canteen was ordered to be pulled down forthwith and a number of tents to be banished. This vigorous assertion of authority alone allowed order to be maintained in the large floating population of Scutari, and was the more valuable because it was exceptional. Storks united the *suaviter in modo* with the *fortiter in re* beyond any officer I have ever known. Very few indeed would have had the moral courage which enabled him to check a spirit of mutiny in the garrison of Malta, by having a soldier, found guilty by court martial, *shot* (about 1863).

I have already mentioned the want of hulks, for which there was plenty of room, to relieve vessels of a costly character of their cargoes. Deputy-Commissary General Smith mentioned to-day that there were thirty-four vessels consigned to the Commissariat then in the Bosphorus, and eleven more expected. The supplies were not wanted, and there was no available store accommodation on shore. What was he to do? Many of the cargoes were nothing but chopped straw. He contended that the Commissariat, from its former relations with the Treasury, was likely to take, and did take, a higher and larger view of public expenditure than other departments. The Admiralty refused to pay £30,000 for the ss. *Telegraph*, but paid £2,500 a month for her for eighteen months = £45,000.

I got over to Pera to-day and made various purchases, which included two very pretty drawings by an Italian artist, Precioza, made up with figures I had previously selected from his sketch-books, for which I paid £10. I bought also a number of Crimean photographs, which have all faded but one or two.

The remaining four or five days of my stay were occupied with every sort of inquiry and personal inspection, which occurred to me as useful. One was spent with Mr. Tatham, the Ordnance store-keeper, a very active, good officer, whom I knew in Canada. He declared that he had to work ten hours a day and seven days in the week, and must break down without more assistance. I was ready to believe him, for such confusion and want of system as prevailed must double everybody's work.

There was a large hospital at Kulali or Koulali, which I have not mentioned. We decided on breaking it up, as no longer required. There were on 14th January, 152 sick, with 137 vacant beds. Drs.

Rowden, Gant, and Glover received notice that their further services would not be required.

Kulali was, besides being the headquarters of the German Legion, the great commissariat coal wharf and forage store. Stories were told of feats of strength of the Turkish hammals (porters), that would have been hardly credible had I not seen what Canadians and Indians could do. Instances were mentioned of men carrying from 700 to 800 lbs. weight, in bales of compressed hay at 300 lbs. to 350 lbs. each, and seven bread bags at 112 lbs. each = 7 cwt. This weight was given me by several people as about the limit.

Tatham had then twelve cargoes of hutting to be unloaded, and as there was only wharfage for two at a time, and that taken up by commissariat vessels and steamers coaling, he did not expect to do it in less than six months. If I repeat facts of this kind, it is because they represent war under an aspect not regarded by the historian, and little realized by the British public.

I had to draw up a report for the joint signature of General Storks and myself, on the special subject of the reduction of the hospital establishments, and to arrange many things with Miss Nightingale, who was almost tearfully anxious that through my representations such orders might be issued by Lord Panmure as would establish her authority over the nurses of all sorts, creeds, and conditions, and put an end to the little mutinies she was perpetually subject to ; and this I happily succeeded in doing. I greatly prize a letter of grateful thanks and acknowledgment I received from her a few months later.

My last day was devoted to sight-seeing, which included a visit to the very curious collection of waxwork figures at Seraglio point, formerly at the At Meidan, curious for the costumes. There were three Sultanas of great beauty, a Vizier, Scraskier, two Chamberlains (lalas), many Janissaries¹ and other personages splendidly dressed. Their headdresses, now nearly or quite obsolete, as we see them in old engravings, were especially curious. There were a few other objects, old arms and the like, but as a museum it was a poor one.

Tuesday, January 15th.—I left Constantinople at 5 P.M. in the *Thabor*, a vessel of the Messageries Impériales. She carried Dervish Pacha and his A.D.C. and about twenty-seven other first-class passengers, including a good number of English officers. I remember Captain Forsyth, 57th, and Lieut. Wyse, 48th. Our voyage was

¹ The Scraskier Tower commemorates the destruction of these lawless heroes. It was erected A.H. 1241-3 = A.D. 1824-6, and is really a very fine monument, about 230 feet high.

destined to an early interruption, for about seven o'clock next evening (16th) we ran aground about twelve miles E. of Gallipoli in two fathoms water, and there remained until about 2 P.M. next day. It was so nice a thing in point of depth, that if a little swell came by she would lift for a moment, then come down flat on her keel, with a quiver from end to end. An English ship, the *City of Manchester*, made an attempt to haul us off, but as she drew seventeen feet of water, she could not approach very near, and gave it up after breaking two hawsers. All the first-class passengers, except Dervish Pacha and suite, myself and one or two French officers, went off to her, and were by her landed at Gallipoli, where they passed a miserable night. We stuck to the ship, and sat down to dinner, reduced from a party of thirty to eight. A Greek barque ran into us about 8 P.M. and a rare row ensued. About 9 P.M. the mate of an English vessel boarded us, mistaking us for the *Oberon*, a vessel also aground a few miles higher up. However, he was very obliging, and promised to stay by us till daylight, as it was quite upon the cards that the vessel might break up if the weather, which was fine, should change for the worse. However, it continued calm, and about 9 A.M. a couple of steamers, with four Greek barques, came up from Gallipoli. We began to discharge ballast and cargo, which lightened her a foot or two, and presently were towed off. The noisy directions, the clumsy manœuvres of the Greeks, the excitement of the crew, "Elle bouge ! regardez donc les taches au fond ! Sapristie !" The captain seemed to me hardly stirring enough ; but he behaved very well, and shook me warmly by the hand when all was over, for sticking to the ship.

17th.—We reached Gallipoli between 3 and 4 P.M., and our deserters began to come on board, rather crestfallen. Captain Forsyth, who was Queen's Messenger, Mr. Doyme, and one or two more, went on in the *City of Manchester*. General Vaillant, an old soldier of the First Empire, was the last. He had found comfortable quarters at the French Consul's.

I shared my cabin with a Baron de Wertheim, a *chef d'Escadron* and a gentleman, but the worst sailor I ever saw. He scarcely left his berth the whole voyage, but I learnt a good deal from him about the French artillery. He commanded two batteries of Horse Artillery of reserve ; he spoke favourably of the Canon-Obusier of the Emperor Napoleon the Third, then just introduced against considerable prejudice in favour of the old guns.

One of my fellow passengers was the Captain of the Port of Constantinople, a man who spoke Turkish perfectly, Italian pretty well, French

a little, and English like an uneducated Englishman. He turned out to have been one of the N.C. Officers of Artillery from Woolwich, a bombardier of the 8th battery, who had accompanied Captain Fenwick Williams to Syria about 1840, Silly by name. He got his discharge, drifted to Constantinople, and had risen by degrees to his present position. He was very pleased to be noticed by an officer of his own corps, and we had many conversations. He wrote down for me a list of the French establishments at Galata and elsewhere, which at the time was interesting.

There was an amusing discussion one evening about the relative merits of various jasmine pipe-stems and amber mouthpieces which various officers prided themselves upon. It was at last referred to Dervish Pacha, who gravely decided that they were all bad, and sent for his own. I learned that the beauty of amber consists in its citron colour, freedom from flaws and size. It is worth about twenty piastres (2s. 10d.) a drachm. A good mouthpiece costs from £5 to £10, and a good jasmine stem as much or even more, if very long, straight and taper. One of the party had a really fine one five and a half feet long; but the Pacha had a finer.

Friday, January 18th.—We passed between Negropont and Andros about noon, and reached the Piræus at 8 P.M. Time did not permit anybody to land, and at that hour the Acropolis, easily seen by day, was not to be distinguished.

Monday, 21st.—Arrived at Messina 6 A.M.; went on shore at 8, and picked up a guide who spoke a little French. We went first to the Church of the Annunciation, of which I did not note anything, then to that of St. Gregory, situated on a height above the town, which commands a lovely view.

I copied the epitaph of an abbess of the adjacent convent :

JVLIA SPATIFORA ET AGLIATA
PRVDENS AT VSQ XXC. ANNVM
MATRONA MOX INTER PRVDENTES VIRGINES
IPSA PRUDENTIOR CVM CŒLESTI SPONSO
AD PERENNIS NVPTIAS INTRAVIT
ANNO MDCXXIX VII IVNII.

I thought the reflection on her wisdom in ever marrying curious.

From here we came down to the cathedral, long famous for its great sun-dial or meridian time, rather than for any architectural merits. The sun-dial is a line about sixty-five feet long, traced in the direction of the meridian on the paving. The light is admitted through a small perforation high up in the south wall, and the place

where a luminous spot should fall exactly at apparent noon of each day of the year is marked by a piece of coloured stone let into the white marble floor, the dates and various astronomical signs being let in in like manner. The scale is large enough to make each day distinct. I do not see why this very simple device should not be more generally adopted, especially in large school-rooms.

After a *déjeuner* at the Hotel de la Victoire, I took a carriage with two fellow passengers, and we drove about a little. Messina is a handsome town, the main streets wide and unusually well paved. The houses bear the stamp of former greatness, though now somewhat shabby. We found everything very cheap, *e.g.*, kid gloves $1\frac{1}{4}$ franc a pair; our carriage two francs. For a trifle we got quantities of flowers—roses, double white violets, geraniums, iris—at a large garden, and some mandarin oranges on the wood. But we had to return on board by half-past eleven, though the captain did not start before one. I bought out of a boat alongside six very clever and spirited terra-cotta figures for fifteen francs.

The view of the coast of Catania after leaving Messina, and passing the immortal Scylla and Charybdis, is lovely, Etna well seen in the distance as a snowy peak. About 4 P.M. we were abreast of Stromboli, from which a lazy column of smoke was rising; but we were not too far off when it fell dark to see red flames, which burst out at intervals. It did not altogether look the “Paradis terrestre” which our captain said it was.

Thursday, January 24th.—We reached Marseilles about 7 A.M. I indulged myself with a day here, and then travelled straight through to Calais without any stay in Paris beyond what was necessary between the trains. I travelled in uniform, and found immense virtue in the cocked-hat box among my baggage. I was so tired on reaching Calais that I dropped asleep the moment I could get to a sofa, and reached Dover in happy unconsciousness of a very rough passage.

Sunday, January 27th.—Arrived in London at an early hour, and had the happiness of finding my dear wife and children well. They did not expect me quite so soon.

Government paid all my travelling expenses, and allowed me two guineas a day. Altogether the mission cost the Treasury £368 5s. 2d. Had the war lasted, it would have led to great economies. As it was, the consolidation of medical establishments and reduction in the number of doctors and nurses abundantly repaid the expense.

My report was never completed. A good many pages, however, were put in type, and will be found among my papers. I don't think that the joint report of General Storks and myself was printed.

A copy in MS. will be found in a bound volume entitled "Hospitals in the East," with the MS. returns collected.

A couple of days after my return—that is, on January 29th—I received a summons to Windsor. Having been there two or three times with Captain Fishbourne on the affairs of the Patriotic Fund, I knew the way. Prince Albert received me at a quarter-past ten; but the "breakfast in the equerries' room," that was held out as an inducement to take the first train, proved an illusion; none was offered. Probably I ought to have asked for it on arrival. H.R.H. received me very graciously, shook hands, and began, "You have been as far as the Crimea?" I briefly sketched my journey. He caught at the mention of Kertch, and inquired much about the works there, the chances of defence, the state of the troops. He appeared struck by my statement that the conscription in Turkey only yielded 15,000 men (Mussulmans), and suggested that we might raise a Christian army. He thought the Porte was prepared for this. I ventured to question whether the Turks were prepared, and pointed out that the Christian population was to a man on the side of Russia. We got next to Balaclava. "Why had not the army been employed in throwing up a line of defences to secure that position?" Then to the system of returns. "Why were they always so much behind time?"

With regard to this last inquiry, I am not sure whether it was before or after my visit to the Crimea, *i.e.*, whether in relation to this conversation or not (I find that it was in 1854) that I received confidential instructions to devise and draw up a set of very simple returns that were to work up to one comprehensive daily state of the army, omitting all trivial detail and particulars only required by the financial departments, and could be forwarded by every mail. This, with the invaluable assistance of Major Marvin, I did, and I know¹ that they were for a short time at least adopted. I rather expect that whenever Lord Panmure's papers are published, which is not to be until the end of this century, there will be some reference to them. For it is a fact that in 1854 and the early part of 1855² neither the Ministers nor the Queen herself were ever in possession of essential facts relating to the numerical strength or the efficiency of the army until long after date. This arose partly from the incommunicativeness of Lord Raglan, and partly from the cumbrous nature of the machinery employed.

¹ From the information of Mr. George Dalhousie Ramsay, Lord Panmure's executor and custodian of his papers.

² Down to the beginning of May, 1855. See Kinglake, ix. ch. x. 1.

I took with me to Windsor photographs of the newly uncovered ancient monuments in the Hippodrome at Constantinople (at Meidan), in which the Prince appeared much interested, and especially so in that of the Plateau Tripod. Remarking, "The Queen will like to see this," he carried it off to an adjoining room. Alas! he did not bring it back, and I never saw it again, which was a matter of regret at the time.

After this I resumed my work at the War Office, and the slow progress I made in completing my personal report for Lord Panmure is attributable to the quantity of work, and to the fact that the peace negotiations, already begun, made him indifferent to it. Hostilities were suspended on 29th February.

(In the summer of 1856 the Queen held a review of the troops at Woolwich, and Colonel Lefroy wrote to his wife :)

" July 14th, 1856.

"This has been a glorious day for the Artillery; we turned out ninety-two guns with all their waggons, and four ammunition brigades, in such a style as was never seen in England before. When I went to shake hands with Bingham¹ upon it, he declared that he had been crying for joy!

"It was a noble sight—such horses, such men. They first marched past at a walk, then at a trot, the men riding at the limbers. Then the Horse Artillery at a canter, poor Henry² led, without an arm, but looking very well. The Queen noticed him particularly. She wore a scarlet body to a blue riding habit, general officer's sash and feather; she looked very pretty on horseback.

"John could not get a place in the train, so my uniform was not in time. Being thus outside the crowd, I fell in with the Duke of Newcastle, sitting like a banished lord by himself. He asked me to stay with him, which I did, and afterwards took him to mess. I heard a fellow in the crowd say, 'Who's that chap with the beard?' Somebody told him. 'And who's 'im with barnacles?' This was a puzzler. Everything passed off perfectly—no disorder, not much dust, no accident. Being mounted, I saw just as well as if I had been inside the circle.

"The Duke of Cambridge is Commander-in-Chief. They are sending three regiments and a battery instanter to the Cape. Every sign of a formidable row there."

This year was marked by a great achievement in mechanics, which,

¹ Colonel, afterwards D.A.G.

² Colonel Henry, R.A., lost an arm in the Crimea.

because it was abortive, attracted far less notice than it merited. This was the completion of a great wrought-iron, smooth-bored gun, weighing nearly twenty-two tons, at the Mersey works. It was known as the "Mersey," or the "Horsfall gun" (see *Times* of 10th November), and fired a round shot of 280 lbs. with a charge of 50 lbs. It was presented to the nation, and a few years later, when Sir John Pakington was Secretary of State, I got his permission to have a commemorative inscription cut upon it.

We spent our holiday at Bideford. I got rooms at the Burrough House, rendered famous by Kingsley's "Westward Ho!" It was then a large, rambling farmhouse, but the date 1588 was conspicuous in our sitting-room. This was long before the neighbourhood had been robbed of its rural attractions by villa residences and large schools; but I believe that Clovelly is little, if at all, changed.

Among Lord Panmure's schemes of army reform was one which he communicated to me in August. It was to bring the education of the army more directly under the Secretary of State; to abolish Honorary Boards of Commissioners for Sandhurst and Chelsea; to take the control of regimental schools out of the hands of the Chaplain General; to make the whole machinery more efficient and more complete. For example, to improve the then senior department at the Royal Military College, and to provide better education for cavalry officers.

He explained his views at considerable length, and directed me privately and confidentially to draw up a scheme for his consideration to give effect to them.

(Writing to his wife he says:)

September 10th, 1856.

"After I had closed my letter to you to-day, I had an adventure. You must know that I had found on my table, when I returned, a dusty roll of papers, which turned out to be a proposal of mine, dated February, 1855, with the documents on which it was founded, urging the necessity of taking some steps to give the British artillery the advantage enjoyed by every other artillery in Europe, of possessing, in an authentic, official form, the details of construction of our own material, and a published guide to all the equipments which an artillery man can be called upon under any circumstances to handle or to prepare. This paper had, it seems, been turned out of some recess of Lord Panmure's room during his absence, and came back to me as its lawful parent. I had really forgotten all about it, but reading it over, and finding that Lord Panmure *more suo* had expressed no opinion, and had simply passed it by in silence, I

determined to take the bull by the horns and get the question settled. Accordingly I made an excuse for going in to him, and, having spoken on the immediate subject, said that there was another on which I was anxious to see his lordship, and produced my roll. He was very good-natured, and heard what I had to say ; but without at once answering me, said, ‘ By the bye, this reminds me of a subject on which I wished to see you ’ ; and hereupon he broached the whole question of military education. He saw that the time was coming when a number of questions of organization must be entered upon ; among them that of the superintendence of military schools, and of the whole education of the army, including that of the officers ; that he thought I should be better employed, considering my ‘ scientific education,’ in that way than as ‘ a sort of senior clerk,’ and that he had fixed on me as the future ‘ Inspector-General or some such thing ’ of the whole place, if I were willing to undertake it. He proceeded to express his views in detail as to several features of the plan—examinations for the staff, changes at Sandhurst and Woolwich, gratuitous education for orphans of officers, schools of application, district instructors and so on. I listened, of course, with great interest, having been prepared for it by Mr. Monsell’s communication some weeks ago, and said that I felt much honoured by his selection, that the duty was one I should take great interest in, and finally that I was prepared to undertake it. He said that the Chaplain General, who has now plenty to do in the purely clerical line, is fully prepared to give up the schools, and that Sir. H. Jones quite understands as regards Sandhurst that such a measure is in contemplation. It was settled at last that I was to prepare and lay before him a detailed project for the whole system, when he will see me again.

“ Thus, therefore, this matter has come to a point, and perhaps, if all goes well, the next session of Parliament will find me in one of the highest and most responsible situations any man can fill in relation to the military service of the country.

“ If personal requirements were the basis of the selection, I should despair of success, but I take confidence from the hope that they are not. Divine Providence has led me onward through many untried paths of life to this post, for which I feel that the experience I have acquired, the bent of my mind, the advice and assistance I can command, and to some extent the absence of competition in the field, are certain qualifications. I shall throw myself into it, sink or swim—but mind, if I break down, or if the plan breaks down before I am fairly launched, you are never to reproach me for overweening confidence, or ‘ imposture.’ I shall do my best. Upon those who

appoint me be the blame if my best turns out to be feeble trifling in a great cause, and if the country or the army finds out that A., B., or C. should have been the man, not me.

Lord Panmure agreed to what I wanted for the artillery, which I consider one of the most important points I have ever carried, and I have *carte blanche*, in point of fact, to work it ont. The other matters will take a little time. Thus in this world weak things confound things that are mighty, and the instrument that to all appearances might do a thing, and ought to do it, is set aside by one nobody thinks of."

The following letter will show the gravity of the questions thus raised :—

"WAR OFFICE, *September 19th*, 1856.

"MY LORD,

"In reflecting, as I have done very carefully and anxiously, upon the best constitution of a future system of army education, embracing the highest and the lowest schools, I have been led to the conviction that it will be impossible to dispense with some establishment based on the present Senior Department at Sandhurst, but more nearly approaching in scope the 'École d'application de l'état Major' at Paris, and differing from Sir Howard Douglas and Mr. Sidney Herbert, who contemplate its transfer to Farnham again. I think it should be in London. I am well acquainted with Farnham, which possesses no recommendation whatever, beyond its proximity to Aldershot. The formation of the establishment there now would be attended with great expense from the rise in the value of property, On the other hand, its transfer to London would be attended with the following advantages."

These advantages I enumerated. These papers will be found in print in a volume in my library.

It would have required much higher ability, rank, and influence than I possessed to carry so big a thing through, in the teeth of the Horse Guards, the opposition of many of the highest opinions in the service, who constituted the Board of Commissioners endangered, the Treasury, and the critics, who were bound to find fault. The thing fell through. Government laid out about £100,000 on a Staff College at Sandhurst; everything else remained much as before.

I was examined at considerable length by Lord Dufferin's Committee on May 4th, 1869, on the subject of military education, and

my evidence will be found in papers relating to my War Office services, vol. ii.

Having quietly dropped his great scheme, Lord Panmure marked, I may venture to say, his unshaken confidence in his advisers by the following memorandum :—

“ *February 18th, 1857.*

“ Colonel Lefroy will henceforth undertake the duties of Inspector-General of Army Schools, retaining his present salary; and Sir Benjamin Hawes will arrange with him the mode of conducting this business in the most convenient manner. Colonel Lefroy’s situation as a senior clerk will not consequently be filled up.

“ P.

“ W. O., 18/2/57.”

I was accordingly gazetted to the appointment on March 6th, and in due time received a commission as Inspector-General, in due form, under the royal signature, countersigned “S. Herbert.” It is the only such commission ever issued. This office was transferred to a new Council of Education in 1859. I made one Report, which was laid before Parliament in 1859.

On June 4th, 1859, *The Examiner* had a long article on education in the army, from which the following extracts are taken :—

“ Up to 1855 the Chaplain-General superintended the educational branches of the army, together with his immediate department; but Lord Panmure, impressed with the great importance of this subject, and desirous of giving a purely secular character to institutions formed for the benefit of various denominations, placed the army schools, and all matters connected with regimental education, under the direction of Colonel Lefroy, an officer peculiarly fitted for the duty entrusted to him, and whose admirable Report addressed to the Secretary for War shows, not alone his ability to deal with a very difficult subject, but how completely he has his heart in his work. . . .

“ Foremost among the many improvements effected by Colonel Lefroy is the organization of a large staff of trained schoolmasters. Indeed to this measure the success of the present army system is mainly attributable. The emoluments of those instructors are—regard being had to army pay generally—very liberal, but military prejudice has not hitherto allowed the schoolmaster the rank of gentleman. A first-class schoolmaster, who, we are told, superintends the schools

of twenty thousand men and a proportionate number of children, ranks but one step above the regimental sergeant-major, and must stand at attention if addressed by the youngest ensign in the service. This is certainly one way of making the soldier respect knowledge! Colonel Lefroy strongly urges that a superior rank should be conferred upon this deserving body, stating that he can confidently affirm that no class of non-commissioned officers better deserve the prospect of rising to the honour of a royal commission than that of schoolmaster.

“We will venture to affirm that the honour would be mutual.”

The *United Service Gazette* had two long and equally favourable notices. (June 4th and 11th, 1859.)

A part of the duty of the Inspector-General was that of looking after military libraries, reading and recreation rooms. Miss Nightingale greatly assisted me by placing £100 at my disposal for the supply of games and other means of amusement (in August, 1857), which enabled me to infuse new life into them in many garrisons. The supply of books was a privilege I valued highly. I studied the sort of literature soldiers would read. I had to resist a great deal of pressure at times to put down works on the catalogue from which demands were made, that I knew very well they would *not* read. This was worth perhaps two or three hundred copies to the publisher. I gradually withdrew a great deal of trash.

With regard to inspection, my practice was to run down to the different garrisons, when work was a little slack at the War Office, and get it over in a day or two, the work at the War Office being conducted in my absence by my friend and assistant, William Lyon. Twice a year there were examinations for the appointment of army schoolmasters at the Normal School, Chelsea, when I set most of the questions, and, with the assistance of the masters, assigned the marks. I also visited the Duke of York's School, but did not set the questions at the examination of the boys. Both Hullak and Martin were in turn singing-masters at these schools, and nothing was pleasanter than to attend their days of instruction. The quality of the singing was raised immeasurably under their instruction, but I never anywhere met with a voice to be compared with that of a little red-haired, pock-marked Irish girl, named Herbert, at the National Training School in Dublin.

This reminds me of visiting the Royal Hibernian School, and being much amazed one Sunday at hearing my office introduced by an obsequious chaplain, after the Lord-Lieutenant, in the prayer for the Queen.

A boy named Morgan, who had been flogged and dismissed from Chelsea in 1855 for stealing eight shillings, came back in December, 1858, and repaid the money. He had enlisted.

It helps one to realize the enormous strides with which ship-building and gunnery have advanced since the Crimean War, to remember that the Admiralty appointed a committee—of which Admiral Sir Thomas Maitland (afterwards Lord Lauderdale) was President, and Admiral Chads, R.N., Captain Caffin, and other experienced naval officers with whom I was associated, were members—to consider and report on the limit of weight that ought to be observed for naval guns.

The committee reported that five tons was a limit that ought not to be exceeded. As late as 1863 the Admiralty adhered to it, although they allowed that 149 cwt. was not beyond the limit that “may be permitted under exceptional conditions.” It was, of course, the ships, not the guns, that were wanting. As then built, they could not carry much heavier metal, nor were the appliances in use adequate to working it. Nobody foresaw the approaching revolution in ship-building or the growth of the estimates.

I have referred to my interview on the 29th of January with Prince Albert, but forgot to mention that H.R.H. requested me to put down in writing what I had told him verbally respecting the ancient monuments in the Hippodrome at Constantinople. The consequence of this was that instructions were sent to General Storks to have excavations made round them. This was done by Captain Lockner, R.E., in April and May, whose report is bound up with other documents.

Copy of a memorandum on the monuments in the Hippodrome at Constantinople, prepared for H.R.H. Prince Albert, by Lieutenant-Colonel Lefroy, R.A., January, 1857 :—

“There are three celebrated monuments extant in the ancient Hippodrome, now called the Atmeidan, at Constantinople :—

“ (1) The column of Theodosius ;

“ (2) The Brazen Pillar ;

“ (3) The column of Constantine Porphyrogenitus.

They stand in a line in this order, from north to south, nearly, and may be 100 feet apart. The column of Theodosius consists of a pyramidal obelisk of granite about 50 feet high. Its pedestal is covered with sculpture, and bears inscriptions in Latin and Greek, commemorating the triumph of Theodosius over the Goths.

“Of the centre one, the Brazen Pillar, Gibbon observes (Chapter XVII.): ‘The guardians of the most holy relics would rejoice if

they were able to produce such a chain of evidence as may be alleged on this occasion.' This column, as it may be called, is known to have supported a golden tripod in the Temple of Delphis, dedicated to Apollo by the Greeks after the defeat of Xerxes, B.C. 326. It was brought from Delphis by Constantine. The shaft is in the form of three serpents, forming a graceful spiral, their folds opening out from the base on their tails towards the heads, which, however, are now wanting. Its full proportions and general designs had never been seen—in modern times—until an English gentleman (now Sir C. Newton) excavated at the base of it towards the end of 1855, and found it buried in an accumulation of rubbish to a depth of about one-third of its height, which is about 16 feet. He came to the foundation stone at a depth of 6 or 7 feet, but whether it stands on a pedestal, and that the real base is still lower, has not been ascertained. The other two monuments are buried to the same depth, cutting off the inscriptions upon them at the fourth line, and equally injuring their proportions.

"It is humbly suggested that the more complete restoration of all these interesting monuments of classical and Christian Constantinople is a work worthy of the British Government. There appears to be no difficulty in effecting it, and if no objection was raised to the unauthorized investigation of a private individual, a formal application to the Turkish Government can scarcely fail to be successful. The present moment is peculiarly favourable for investigating the archæology of Constantinople in every way, for the British and French are allowed to go anywhere and to do almost anything. . . .

"(Signed) J. H. LEFROY."

As already stated, the Prince acted on this recommendation.

Captain Lockner, R.E., in his report dated 23rd May, 1856 (?), gives some further particulars :—

"The column of Theodosius is of marble, 9 feet square, resting on a cubical block $10\frac{1}{2}$ feet each way. It has once been covered with metal plates, none of which now remain. The height was about 108 feet above the then surface, or 115 feet altogether."

An inscription in very bad Greek may be thus translated :—

"This four-sided column ever lying prone on the earth
 Alone set up Theodosius the King
 Adventurous Proclus was commanded
 and big as is
 The column [he created it (?)] in 32 suns."

A French translation I saw made it “L’Empereur Theodose seul, ayant osé choir la colonne quadrangulaire colossale qui toujours (longtemps) a été couchée par terre, Proclus en fut chargé, et la colonne immense se dressa en 32 soleils (jours).” There is a Latin inscription also.

The Egyptian obelisk is 50 feet high and about 8 feet square at the base, which rests on four bronze blocks. It stands on a pedestal of marble 33 feet high, covered with sculpture. An inscription, of which I have no copy, was found by a German savant on the base of the Plateau Tripod, much to the vexation of Mr. Newton, who had failed to observe it.

There was an old army surgeon named W——, living at this time in Toronto, reputed very able in his profession. He was formerly in the Dragoon Guards. He had almost or quite retired from practice, and I knew him but slightly, his opinions as an avowed infidel being quite enough to keep us apart. He had an illegitimate son, who drank himself to death at an early age. I am tempted to transcribe as a sad but salutary lesson the account given by Lady Robinson of his own last days. The letter was dated May.

“Since I last wrote Dr. W—— has been buried. His end was sad after all. He had since the death of his son had, as it were, a pricked conscience, lamented his treatment of him while living, and thought that a kinder, more considerate management might have produced happier results, and that with a happier home he might have been a better man. This regret and repentance were all too late. However, he felt it strongly, and was led by the feeling continually to visit his son’s grave, and to sit in the vault for hours. Mr. Hawke had, it appears, once found him there in a sort of fainting fit and entire prostration of strength, laid on his son’s coffin. In this position he was again found one Sunday, having evaded the watchfulness of his son-in-law and daughter. He never rallied, and died at six the next morning. What a life ! and what a death !”

I saw the touching words in one of his letters which Miss Ross showed me, “The old cannot die !” A more miserable man in himself, in his family, and in the harvest of his sins, is rarely met with. He had, however, for some months before his death, regularly gone to church. In one sense he repented, and in one sense he believed. The mercies of God are infinite.

May 25th.—Sir Benjamin Hawes mentioned a curious occurrence—one of those in which we seem to have the conditions of a supernatural story, wanting only complete coincidence. Some years

previously he and Mrs. Hawes (as she then was) saw, as they thought, at some large party, their son Ben leaning against a pillar, the length of the room from them. They knew that he was, or should be, in India, but both agreed that it was he, and they were really startled and somewhat agitated. Before they could approach him he moved away, and was lost in the crowd. The son was in India, all right. It was merely an accidental resemblance, but, as he remarked, it was a very extraordinary one which could deceive both parents.

A few days later there occurred a really painful case of apparent premonition. The principal military storekeeper at Woolwich, Mr. E. P. Pellatt, a man much liked, was summoned with other heads of departments to a meeting fixed for the 31st. He wrote, "Can attend as far as I see at present." On the 30th he was thrown out of his gig, and never spoke again. He lay in a state of insensibility to June 2nd. He had never before inserted any qualifying words.

This year Charles W. Robinson, who had been commissioned in the Rifle Brigade, embarked for India. Lukin and his wife, George and Adelaide Allan, and Christopher, were all in England or on the Continent. George Allan, who returned to Toronto in September, was elected to the Legislative Council, an honour which cost him nearly £3,000 in election expenses. The most flagrant and notorious bribery prevailed, and although he wrote and spoke most energetically against it, no doubt his committee, or some of them, gave into it. They gave him and his beautiful wife a magnificent torch-light reception, with the wildest enthusiasm.

One of those misadventures, too unlikely for fiction, which real life sometimes presents, happened to him this autumn. I transcribe a letter from Lady Robinson, dated October 12th.

"Poor George has met with a dire catastrophe. For the last few days he has been sorting letters, deeds, papers, etc." (his father having recently died). "The waste pieces he threw on the hearth at night, and those to be preserved he put in the paper-basket, which he carried up to his dressing-room on going to bed. Unluckily he dined with us that evening, and forgot all about it. The basket contained, as he calls it, all the Brandbridge correspondence, many more letters of a valued kind, the commission from the Queen to his father as legislative councillor, some deeds and legal documents of consequence. Can you conceive his dismay upon coming down the next morning to find that *every* article had been consigned to the flames, excepting a few sheets of blank paper that the housemaid thought might be useful! The housemaid tribe are not given to brains generally; but

the idea of burning rolls of parchment, big seals, etc., is a crowning act of stupidity one would have thought almost beyond even their capacity. The replacing the deeds will be expensive and troublesome, and the disappointment as to the rest is grievous.”

This was not the only misfortune of the year. Adelaide Allan's father, Mr. Schrieber, was swindled out of £8,000, and Mr. Arnold, Mrs. Lukin Robinson's father, out of £4,000, by fraudulent sales of land and forged deeds. They were both rather flighty old gentlemen, with an avidity for investments at more than the then safe 6 per cent.

I took my family this year to Elands, near Itchel, leaving to be printed a report,¹ dated 10th August, on the then state of experimental investigation into the best form of rifled ordnance, and supported by the affectionate kindness of my sister-in-law, Jessie Lefroy, who promised to look after the children, my dear Emily and I indulged ourselves with a trip to Paris, August 16th to September 11th.

We lodged with a Monsieur and Madame Turpin in Plassy, outside the barriers. She was English by birth, but quite a Frenchwoman in all her ways. He was a literary man, filling the office of *archiviste* at the *Dépôt de la Guerre*, and was then engaged in preparing for publication the first volume of Napoleon's correspondence. His instructions were to omit nothing, and he literally obeyed. I do not remember that there is anything particularly disgraceful in that volume, but it became evident, as the work progressed, that it would be impossible to adhere to that principle. In particular his correspondence with the Court of Austria was offensive and insulting beyond belief. He was not a gentleman, but people were hardly prepared to find what a ruffian he was. This correspondence was sent to Vienna, ostensibly for verification, but in fact to give the Austrian Court an opportunity of withdrawing what it did not choose should appear.

Among the many curiosities of the Archives was a fair copy, by Marshal Berthier, who had been chief of the staff to Napoleon in his Italian campaigns, of the general orders issued, which he had published. To the surprise of old soldiers, when issued, they all appeared with Berthier's signature, as if issued through him. It was only on the accidental recovery of the originals that it was discovered that he had altered the whole of them—the fact being that Napoleon habitually gave his orders in the first person, and not through the chief of his staff at all.

I was shown the only example known of something like indecision

¹ $\frac{50}{911}$ 60. For General Peel.

in Napoleon. It was the original of a very famous order issued before Austerlitz. He had twice signed it, and effaced his signature. He signed it a third time, and despatched it.

Napoleon signed every commission in all his armies "Nap.," and sometimes only a rapid N.

One curious difficulty experienced was how to arrange documents bearing the same date in the order of time. So intense was his life, so wide his control, that events often occurred between morning and evening that required modification of instructions, or even made complete change of plans necessary, producing apparent, but not real, inconsistency.

Another difficulty, not always surmounted, was the identification of plans.

The dépôt had suffered many losses in the abstraction of papers. Soult, when Minister of War, employed an officer who was in his confidence in some long researches that nobody quite understood. Their real object was to find a foolish proclamation he had issued as King of Portugal, a title he dreamt of in the general delirium of Napoleon's generals, and which Napoleon made him drop in a hurry. The officer found it, and disappeared—as did the proclamation.

Louis Napoleon did exactly the same in regard to a proclamation he had issued at Boulogne.

As a general rule, the originals of all public correspondence were sealed up and returned to the Archives on the death or removal of a high official. It was sometimes evaded, and thus the families of Soult, Massena, Berthier, and others managed to retain quantities of important papers, which the Archives vainly desired to get hold of. The same thing occurs in our own service. Lord Raglan's executors retained much public or official correspondence as his private property,¹ Sir H. Jones, R.E., and Admiral Roper's secretary, the secretary to the Sebastopol committee, all did the same. It is, of course, often very difficult to draw a line between public and private papers.

"La vérité est toujours faite pour attendre." It is eminently true of history. I copied this fine axiom from a letter of Voltaire's addressed to Marshal de Belleisle.

My friend M. Turpin was Orleanist in politics, and had a very bad opinion of the then Napoleon and his *entourage*. The accounts he gave of the late Marshal St. Arnaud were quite as bad as those published by Kinglake, four or five years later.

¹ Sir W. Codrington.

The popular belief was that he had robbed the "grenouille," a slang term for the regimental chest. On the marriage of his daughter, the emperor presented her with 4,000 francs (£160). She suspected something, and took an early opportunity of thanking His Majesty for the munificent present of 3,000 francs he had made her. Then it came out St. Arnaud had appropriated fr: 1,000.

A large quantity of banknotes were once missing from Louis Napoleon's portfolio (in 1854). General Cornameuse said plainly to St. Arnaud in Napoleon's presence, "The money is gone, and either you or I have stolen it!" They descended to the garden, and then and there fought it out. Cornameuse was killed (it was given out that he had died suddenly of apoplexy). St. Arnaud received the wound in the groin which was unhealed when he embarked for the Crimea, and was the ultimate cause of his own death in September, 1854, and of his total failure as a commander at the Alma.

Paris was at this time pervaded by police spies, *mouchards*. No circle was safe from them. The coiffeur, who occupied the ground-floor of M. Turpin's apartments, was one, a small wineseller, close by, was another, their duty being to keep an eye on the workmen of a large carriage factory near us—all of them Republicans. The gossip that passed in the barber's shop and the *cabaret* was all noted. Another precaution was that no gunsmith was allowed to keep guns in stock in a perfect state; something was always wanting—the nipple, or the ramrod, or a part of the lock, so that they were not useable on the spur of the moment.

Turpin said that very many more French soldiers found their way back from the disastrous Moscow campaign than was commonly believed—as many as 150,000 at least, some of them not until 1815. On the other hand, the strength of the armies that crossed the Niemen in 1812 was also greater than generally stated—as many as 850,000 in all, which is about the estimated numerical strength of the German armies in France in October, 1870 (856,000, "Hayden's Diet.") After the return of the wreck of the *Grande Armée*, an examination was made of the materials of which it was composed. It was found that a very large proportion of the men were Parisian. Their recklessness and gaiety had borne up against their sufferings better than any other temperament.

We spent about three weeks in Paris, and were greatly assisted by M. Turpin's general knowledge in making the most of our time, not neglecting, however, regular French lessons with Madame, and reading with him; but I never got on enough to follow a sermon at the Oratoire properly. The theatres we never tried.

On the 11th September we left Paris for Cherbourg, by way of Caen and Bayeux, and reached it on the 13th. I had no difficulty in getting admission into the dockyard, or in entering a new unfinished fort on the heights.

We drove out to the very picturesque Château de Tour-la-Ville, the property of Monsieur de Tocqueville, but then a mere untidy, neglected farmhouse, where, however, the people were very courteous. Our amusement was to sit in the balcony of our inn and watch the peasantry—admiring the whiteness, quaintness, and endless variety of their Norman caps. These have since very much died out.

On the 14th we took steamer to Alderney, where our Government was at that time spending a great deal of money in building a breakwater, and defending it. If the defences had been completed they would have mounted about 270 guns at a cost of half a million. Fort Tourville alone was designed for 50 guns, and to cost £65,000. The breakwater and other naval constructions were estimated to cost 2½ millions. They were begun in a public fever for harbours of refuge, and by a Government not honest enough to say that what it wanted was a military and not a commercial harbour at all. How much was actually spent before the design was given up I do not know.

Lieutenant-Colonel Richard Crofton, whose eldest son was destined to become my son-in-law, was in command of the Artillery. We dined with him, meeting several brother officers, and the Town Major, Colonel Le Mesurier, a firm believer in the divining rod, and in his own ability to discover water, or the precious metals, down to a five-shilling piece, provided there was no larger mass within his sphere. If it were under water he said his power was neutralized. I did not see it tested.

The Governor of Guernsey at this time was my old friend General Harding, R.E. He was commanding R.E. at Woolwich in 1837, and I was often at his house. He was Inspector-General of Fortifications in 1854. His very charming wife was, I think, *née* Brackenbury, daughter of the well-known consul, I believe, at Cadiz, and they had one daughter, Zillah Harding, who promised to inherit her mother's beauty and talent. It was a great pleasure to enjoy their hospitality again. We made, however, no long stay in Guernsey, but went on to Jersey, where Godfrey Mundy was Governor. He was half-brother of the Duke of Newcastle, and was Under-Secretary of State for the short time he was War Minister, but never impressed me with any superior talent, although his pleasant book, "Our Antipodes," showed literary ability, and he had seen a fair amount of colonial service.

However, Lord Panmure did not think him up to the mark, and got him his present appointment, which he assured me did not pay. The supposed cheapness of the island was quite imaginary. Nothing was cheap except claret, and the society very indifferent.

He had lately been present at the Emperor's reception at St. Malo, and had been personally treated with distinction, placed next to the Empress at dinner, and so forth. She spoke indifferent English. The same remark was made nearly thirty years later by Coutts Trotter, who had the honour of being admitted into her circle in a voyage home from some Mediterranean port in 1887, so that that illustrious lady apparently had no great talent for language. The Emperor's English also was imperfect. Mundy was persuaded from the stiffness of his gait and the size of his body, that he wore mail of some sort under his uniform.

Our return to England was quickly followed by sorrow. My brother Charles lost his bright and charming wife Jessie, or Janet, daughter of James Walker, C.E., on the 5th October ; from the fulness of the directions afterwards found in her handwriting, it was evident that she had realized the impending stroke, and was fully prepared for it. Her anxiety had only been to conceal her state from her husband and her father. Her death was very sudden, and followed her illness within twelve hours, but she had not been in good health for some time. Clement Lefroy, her son, lost his wife in the same way in 1886.

My trial quickly succeeded. My dear Emily had shown no sign of weakness or suffering during our autumn holiday, but she began to fail early in December, and on the 18th was so unwell that we put off a dinner party invited for the 23rd. She recovered, however, sufficiently to take her place on Christmas Day ; but on New Year's Day took to her bed, and never left it.

I cannot bring myself to narrate the infinitely touching story of her sufferings, which were especially intense from the 1st to the 16th January. But they were borne with a sweetness, courage, and patience beyond belief. No one heard a murmur from her lips. She restrained the outward expression of her agony, and retained her presence of mind and even cheerfulness, when free from pain, in a way which astonished her medical attendants. She wept but little, and evinced no fear of death or reluctance to leave her husband and children, dearly beloved as they were. A sweet resignation possessed her soul, with a childlike trust in the mercy of her Redeemer.

For some hours on the 23rd we had hope, and she herself had confidence, that the fell disease had taken a favourable turn. But it was an illusion, and on Tuesday, January 25th, at half-past ten A.M., with

the sun shining in at the casement, as she noticed, her pure spirit joined the glorious assembly and Church of the first-born in heaven.

A day or two previously she asked me to get her some print or picture that her eyes might rest on of "Jesus showing mercy." I bought the beautiful engraving of "Christus Consolatur," which has ever since hung in my room.

New Year's Day of this year was marked by a memorable speech of the Emperor of the French to the Austrian Ambassador — a speech which Europe at once understood as meaning war, and Austria at once prepared for it.

Knowing well that none of our Mediterranean fortresses were in a proper state of defence, Lord Derby's Government, then in office, determined on sending out a commission to take steps in concert with the governor of each fortress, to make good any palpable defects, to set in train measures not involving any very serious outlay, and to report with expedition on the state of the works and armaments.

For this duty General Peel selected the late Colonel Owen, R.E., and myself. I do not know that I should have been selected had I not asked for it. I went to the Duke of Cambridge, and H.R.H., in a manner for which I have ever felt grateful, after a feeling allusion to my recent domestic affliction, and casually remarking "You know you are not one of my men," most kindly consented to recommend me.

I had but little time in which to make the many arrangements necessary, for I left London on the 19th March ; but it was arranged that Mary Robinson, my sister-in-law, should take principal charge of the children, having a governess of about her own age under her ; and that Mrs. Walter Merry, a titular aunt, residing, I think, at Norwood, should be the *Deâ ex machina*, to advise in difficulties.

Owen and I sailed from Southampton in the *Indus*, P. & O., on the 20th, and landed at Gibraltar on the 25th March. We took up our quarters at the only decent hotel, and then waited on the governor, General Sir James Fergusson, to report our arrival, and communicate our instructions. Being placed by him in communication with the Major-General commanding, and the commanding officers of Royal Artillery and Royal Engineers, we were at liberty to commence our inspections and inquiries at once, and lost no time in doing so, every officer gladly helping us. As a rule, Owen busied himself in the Royal Engineers' office, and I in that of the commanding officer of Artillery, Colonel Shuttleworth, and the storekeeper, Mr. Martille, both old friends, but we frequently went about together.

Anything more congenial to my tastes than thus exploring every nook and corner of this ancient fortress, quitting the bright sunshine

sometimes for half-forgotten sally ports and subterranean galleries, intruding into departmental reservations, and for the moment galvanizing into life the hidden machinery of defence, cannot well be imagined. One incident is well impressed on my memory. There are 5 batteries adjacent to the Moorish castle, which partly bear on the neutral ground, partly on the sea, from a height of 380 feet. They then had among them one 68-pounder, two 32-pounders, eight 24-pounders, one 24-carronade, four 18-pounders, none of which had ever fired a shot since the siege in 1781-2. We decided to fire a round or two from one of these guns, I think it was No. 3 battery, and fixed upon seven o'clock of a certain morning for the purpose. A squalid street, occupied chiefly by Jews, is here separated by only a narrow alley from the rampart, and it did not occur to anybody, certainly not to me, to give them any notice of our intention. They might have expected something from the unusual appearance of officers and men at that hour, but apparently they did not. The first shot was fired. Then came the scene which I should endeavour in vain to describe—first a batch of outcries and screams of terror, then in every window and doorway one or more terrified faces, the women in extraordinary undresses and head-gear, all inquiring together what was the matter ! The hubbub subsided after a time, but I doubt not it is still remembered by many an elderly Hebrew in Gibraltar.

Fifty years ago it was the custom at St. Helena, and probably at other fortresses of the East India Company, to fire a round from every gun on the King's birthday. They were fired in a regular order and succession, and as the more or less distant echoes came back round the circle the effect is described to have been singularly fine. We did not venture to go so far as this, but we fired a round from several remote batteries, with result of finding them all in a state of efficiency, well looked after by the district officers and gunners.

One experiment interested us and the bystanders not a little. When the fortress was last put in order, in 1841, under the direction of a very able and distinguished engineer, Sir John Jones, for some reason, probably want of funds, he contented himself with parapets of five or six feet thick, and not of the best masonry, as it proved. Owen was very strongly of opinion that this was not enough, and we got the Governor's consent to fire a few rounds at one of the merlons (the solid block between two embrasures) at Europa Point. The merlon was in the left flank, and we fired from the opposite flank, at a range of 190 yards—a 68-pounder.

Owen's anticipations were realized. Only one shot struck fair on

the merlon, and penetrated twenty-seven inches ; two others struck the escarp a little low, but the effect of the three was to shake and partially shatter the whole mass, driving it in four inches. It was evident that a fourth shot would have reduced it to ruin. We followed the prudent example of Don Quixote in proving his helmet, and went no further. A tarpaulin was stretched over the breach, and orders were given for it to be repaired at once.

Perhaps the most immediate good result of our visit, and one visible to all subsequent travellers, was the reversal of guns on the old Mole—twelve 32-pounders of 56 cwt. (not counting six 13-inch mortars and smaller pieces). This powerful battery, as it stood, was almost useless to repel a naval attack, as the guns pointed to the land front. We obtained the Governor's consent to their being turned about to cover the sea front, and this was done (or began) before the end of the year. It had been recommended before, but the stimulus of a political emergency was necessary to get anything *done*.

Of various other recommendations, some of them adopted, some of them nipped in the bud at home, it is not necessary to speak.

We made our report to the Governor on April 14th, and followed it by a paper submitting "a few remarks as to the measures which it would appear to be necessary to adopt in case of a siege, or if an enemy's fleet were suddenly to appear before the place." Reading both documents over, after thirty years of much preachment on strategy and tactics, and all other military texts, they appear to me to offer sound advice—partly, perhaps, because it is a subject on which less has been written in English than on any other.

We also pointed out the insufficiency of the commissariat supply, but it remains to the present day as great a problem as ever—how to feed the garrison and the civil population in the event of a siege ; and I had much interesting conversation with Sir Clare Ford on the subject in 1888. He rejected as monstrous and impossible the turning the civil population, British subjects, out of the fortress to perish, which was one of the alternatives. The other is to provision the place for both soldiers and civilians, to which the Treasury will probably never consent until it is too late.

Anxious to make some return before we left for the many kindnesses and hospitalities we had received, Colonel Owen and I arranged for a grand illumination of St. Michael's Cave, which was most successful. We had as many artillerymen as could find room distributed over the cave, occupying every possible standing point round the rugged sides. At a signal they all lighted blue-lights together, and for a moment or two it was flooded with light,

and we could look down the narrow fissure in the farthest corner, by which, a few months later, a young engineer officer, with the aid of two or three soldiers and some ropes, made a perilous descent to the base of the rock, at the level of the sea, about 1,100 feet. This unhappy young man, reputed the cleverest of his day, was an avowed atheist. Within a year he was killed at a garrison steeplechase.

We left Gibraltar on April 18th, and reached Malta on the 22nd, where we went to Durnford's Hotel, and then waited on Sir Denis Le Marchant, the Governor, and Sir John Pennefather, who commanded the troops.

The enormous extent of the fortifications at Malta, comprising *twenty-five* miles of defensible works, made its thorough investigation a task of considerable labour and fatigue, especially as it was already very hot. I have reason to believe that I was long, but not fondly, remembered by many a perspiring district officer and gunner, but I did it thoroughly. No part was more interesting than penetrating to the outworks, and descending into the ditches by long passages, for the most part filled with stores and artillery apparatus, guided by some ancient gunner, who alone had a clue to the labyrinth. Sir John Pennefather remarked once that, to judge of an escarp, you must see it from the bottom; and certainly, to look up at some of these tremendous escarps from the ditch, was enough to make the boldest assailant despair.

The height of the escarp at St. Michael's Salient is 134 feet; of the Curtain at the Porta Reale, 80 feet; at Nôtre Dame Ravelin, 55 feet. They are largely cut in the rock, which is, however, of a very soft description, as we proved; for here, too, we subjected one of the outworks to the test of being fired at. The work selected was a redoubt in the ditch of the sea-flank of Recasoli; we fired at a range of 150 yards, one 32-pounder and one 8-inch gun, from the left flank of an adjacent bastion, in all 10 shots. The effect was to make a partial breach about 8 feet high and 5 feet wide, and one shot penetrated 5 feet 6 inches, but did not get through, and after a shot or two our confidence in the old masonry was such that some of us remained inside. I do not find the thickness of the wall recorded; its height was $32\frac{1}{2}$ feet. The vibration, like a shudder, that went through the mass as each shot struck it, was very curious. The masonry was cut stone, in blocks 2 feet long, each about 6 cubic feet. On the whole the result was favourable.

This was on May 9th, and on the same occasion a false attack was

made on the fort, in which the little Prince Alfred, then a midshipman in the *Euryalus*, had a somewhat narrow escape. A soldier in the ditch, one of the attacking party, fired off his ramrod, which struck the parapet where the Prince was standing (I happened to be close by), and was doubled up by the force of the blow. The extraordinary excitability, for which Sir John Pennefather was famous, flashed out on this occasion.

I met the Prince several times at dinner, and was always much amused at the way he stood undistinguished among other midshipmen until dinner was announced. Then he stepped forward, offered his arm with a bow to the lady of the house, and conducted her down. Sir John Cowell was his mentor, and managed him very wisely.

Valetta has very much more than its vast fortifications to interest an intelligent visitor. Roman, Greek, and Phœnician antiquities lie in successive strata below the crust of the Middle Ages. They show in the museum a large glass vase of very elegant shape, which was found on the site of a Phœnician temple in digging the ditch of Ricasoli. Here, too, they have seven remarkable stone statuettes, representing the seven Kabiri, which were found in excavating the temple called Hagiar Chim, or Kim, in 1839. They were mutilated female figures in sitting posture, of extraordinary obesity. Kbir = great, Chim, strongly aspirated, is probably Ham. They are idols of a very primitive period, connected with sun worship, or, as Dr. Vassolo, the librarian, thought, with the worship of the Syrian Venus, who had a temple at the Gigantija Gozo; as Mulcarte (Hercules) had one at the Marsa Sirocco. Probably modern guide-books give all this and much more.

Among the architectural features, the old "Guerites," of which very few were left, were the most picturesque. We succeeded in saving one on Isola Point, which was about to be removed by the Engineers—(Il n'y a rien de sacré pour un sapeur)—to place a sixty-pounder, although there was plenty of room without disturbing it. Prince Albert afterwards got an order issued that none of them were to be pulled down on any pretext.

Another object of interest, in a part of the ramparts very seldom visited, was the Arco di Barbara, "opera eccellente del nostro insigne Architecto e Capo Maestro Giovanni Barbara," as an historian says.¹ It is a well-designed and executed skew arch, of considerable size, erected long before the method of crossing a road obliquely was generally known.

¹ See "Malta Illustrata del Giovan Antonio Ciaster," 1772, lib. i. p. 77.

Within an easy drive, the cathedral church at Musta was then approaching completion ; the old parish church, untouched, was still standing in the centre of the nave. The history of this great structure is curious. A humble parish priest, Don Felice Calleja, who died about 1820, was seized with a pious ambition to build in his own parish a temple which should excel, or at least exceed in size, the Pantheon at Rome. With that view he scraped and saved during his lifetime a sum of 30,000 scudi (about £3,000), and left it in trust to the Archbishop to carry out his wishes. Of course, it was totally insufficient, and for a long time the Church showed no disposition to undertake the responsibility. At last the Archbishop thought he saw his way, and in May, 1833, the foundation stone was laid. The church is circular, with a grand portico 80 feet wide, and 20 feet deep, supported on six columns. The exterior diameter is 200 feet, but the walls are of immense thickness, and the clear internal diameter is reduced to 125 feet.

The dome itself was a curious architectural achievement. It was built without scaffolding, the stones being cut in the form of two cubes joined unconformably on one side ; thus each stone keyed in with the stone above it and the stone below it, and a course of three stones in depth formed a complete self-supporting ring.

Whether this was the invention of the architect, M. Grognet, or not, I do not know. There was a bold cornice about two and a half feet wide round the dome at the base, and an almost incredible illustration of the fearlessness of innocence and ignorance had been given a few days before my visit. A young lady or girl, daughter of a commissariat officer, who was one of a party visiting the church, and looking down into the body of it from an opening at the base of the dome, took advantage of nobody being for the moment attending to her to walk forward on this cornice, although the curvature of the dome was such that she could not quite stand upright, and before she was noticed she had got on a good way. It was impossible to turn, but her horrified parents had presence of mind to do nothing to frighten her. On the contrary they cried, " Well done ! " and encouraged her. She completed the circuit, nearly 160 yards, without any consciousness of danger, and rejoined them quite pleased with herself.

The church was said to be 200 feet high externally ; I suppose she would have fallen about 120 feet or more if her nerve had failed her.

We made the excursion to St. Paul's Bay by sea, under the guidance of the late Admiral Spratt, who pointed out in a most interesting way

the local accuracy of St. Luke's description. We were even fortunate enough to find one of the small laced shells, natives of Egypt, peculiar to this locality, which are almost certain evidence that some corn-laden vessel from Alexandria, if not St. Paul's, has been wrecked here.

Finding that there were some of Boxer's parachute light balls in store, but that nobody in the garrison had ever seen one fired, we got the sanction of Sir J. Pennefather to expend a few one evening. It appeared to be perfectly calm, and they acted perfectly ; but there was a light northerly wind aloft, and they disgraced themselves by drifting slowly back and falling in Valetta ! They would have been more useful to an enemy than to the defenders ! However, it gave amusement and some instruction. It is a very common defect in our system that new stores are sent to distant stations with no instructions to the commanding officer to use them ; in consequence, they remain unknown.

I must not omit to mention the Manderagio, probably now a decent, if not a very reputable, locality in Valetta. It had then, and until very recently had deserved, a much worse reputation than the worst slums in London. It consists of a number of narrow, tortuous passages, with many-storied houses on each side, formerly the slave quarters, and still the refuge of the lowest of the low ; the houses approach as closely or closer than those of an Eastern bazaar. Dirt, disease, and crime were rampant here, when it occurred to somebody in authority to see seriously whether anything could be done : I believe it was Sir Gaspard Le Marchant. At all events, his A.D.C., Captain Brett, who conducted me through it, took a most active interest in the work. There was no water supply, no sewerage, and no lighting ; not a few hundreds, but six or seven thousand Maltese lived here in darkness, filth and destitution. Sir Gaspard began by causing a main sewer to be made down the centre of every alley, and obliged the proprietors to drain into it. The houses were then cleared out one by one and thoroughly cleansed and white-washed. The cry everywhere was for water ; but in carrying out these sanitary measures they came to one house where the complaint was that it was so damp, and the wall was green. This struck them as very odd, and they had a hole knocked in the wall. It led them to an undiscovered water conduit ; and by following up this clue they were enabled to re-discover the original system of water supply, and set running again half-ruined dusty fountains in the open street that had mocked the thirst of the people for time out of mind. The result was magical ; riot and crime fell at once. The

police were enabled to patrol regularly. The people got up a humble and grateful letter of thanks, and the Governor and his A.D.C., who often strolled through the place, were always received with respect.

We found the alleys swarming with children, some of them naked, others very nearly so. The mothers, who were nursing some of them, were hardly out of childhood, for Maltese girls marry at thirteen; groups of these were seated quietly working; older women were making cigars and watching us, but with no incivility of word or gesture. The history of this little social revolution is a pregnant lesson to those who have like problems to deal with in our large cities.

I need not refer in detail to our recommendations with regard to the fortress of Malta. There was plenty of room for suggestions, and Sir John Pennefather was most frank and ready in discussing every point—in fact, very pleasant to deal with. There is a valuable report from the late Sir Edward Warde, R.A., on the artillery defence, and another of Sir John Pennefather's himself, which showed that they were both wide awake. Colonel Warde, however, dwelt strongly on the total inadequacy of the force of artillery. It was then only 557 effective men. Since that date a few hundreds have been added by making the Malta Fencibles into a corps of artillery.

We neither of us went much into society at Malta. Owen still suffered terribly at times from his amputation and did not care for it. We dined several times at the Palace, and also at most of the messes. I don't think we either of us went once to the opera. My tranquillity was, however, rudely disturbed about the 20th May by a most unexpected intimation from the War Office that I was not to return to my former position in consequence of changes in the department. I wrote a strong remonstrance, but I need not enter into the matter here, as I shall return to it further on. I had a pleasure which in some degree made up, in hearing that my Report on Army Schools had been laid before Parliament, and receiving a copy in the form of an octavo Blue Book.

We left Malta in the *Caradoc* at 1.30 P.M. on the 7th June, and reached Corfu at 11.30 P.M. on the 9th. This was an extension of the original intention, by after instructions, and was contingent on the pleasure of the Lord High Commissioner. I suppose the semi-nationality of the Ionian Islands required peculiar treatment.

However, on April 24th I heard from Major-General Sir George Buller that, "in concurrence with the desire and opinion of His

Excellency the Lord High Commissioner, I think it most expedient and desirable that Lieut.-Colonel Owen and yourself should proceed to Corfu, with a view to a survey of its defences and armaments, and I trust that your coming may be the means of arriving at some final decision on a question constantly discussed and hitherto unsettled."

Sir Henry Storks, the Lord High Commissioner, who had followed the short administration of Mr. Gladstone, invited us at once to take up our quarters in his Palace, from whence we made the same minute and detailed examination of the curiously antiquated fortifications, as we had previously done at Malta.

The Ionian Islands were in a chronic state of disaffection to the British Protectorate, clamouring for annexation to Greece, and only kept quiet by the presence of the garrison. It had become almost impossible to govern them by their own parliament, and we were too much hampered by treaty engagements with other Powers to knock the parliament on the head and annex the republic. It was already evident that independence could not be much longer withheld, and this took a good deal of reality out of our work, but did not at all impair the pleasure of it.

I had a very startling experience in visiting No. 6 powder magazine in the defensive building in Fort Neuf (a small casemated barrack). It contained 846 barrels of powder, and there were no means of lighting. Groping my way in the dark, I felt something very gritty under my feet, and stooping down took up a handful of loose gunpowder! The head of one of the barrels had been staved in and part of the contents were on the floor; nobody had found it out.

Only two years before an explosion had occurred at Rhodes, by which it was calculated that over 1,500 persons perished (*Times*, January 16th, 1862¹), and there was little reason to expect a long impunity for the most dangerous condition of things in this magazine. We had the powder shifted, and arranged for a light box to be made.

England during her Protectorate of the Ionian Republic made one substantial addition to the defences of Corfu by erecting an extensive casemated work on the Island of Vido, called a "keep," but much more than is usually understood by that term. It cost over £162,000. This work was demolished by gunpowder before we

¹ From 1522 to 1827 the very existence of a vast store of gunpowder under the church of St. John was unknown to the Turks. It was then discovered; but with their characteristic apathy the Turks took no steps to guard against accident, and in 1857 it was blown up by lightning.

gave the islands over to Greece. It might have afforded a noble lesson in military demolition, but our Government was too anxious to get it done quietly to think of the instructional uses of the occasion.

I succeeded in saving for the Museum of Artillery at Woolwich a curious Venetian 15-inch "Porrier" (mortar for throwing stones) of the seventeenth century, and it is there now.

I had several very pleasant rides about Corfu with Mr. Bowen, Secretary to the High Commissioner, now Sir George Bowen, G.C.M.G. His intimate acquaintance with the Islands and their history, which he had edited for Murray's handbooks, and his general knowledge of classical literature, made it very delightful to ride with him to one beautiful spot after another. Here for the first time I saw the pomegranate in luxuriant hedges, and many other semi-tropical plants, not at all new or rare, but which I had not seen for twenty years out of a conservatory.

Madame Valsimachi, formerly the wife of Bishop Heber, was living in Corfu, but I never saw her. Lady Buller was a very charming and accomplished specimen of a Greek or Ionian lady, whom I had the pleasure of meeting frequently. She was the *prima donna* of society, and most obliging in singing; but there appeared to be very little sociability, which was attributed to the badness of Greek servants. On the whole, it appeared to me that the garrison of this beautiful spot was the most bored and dissatisfied of the three in the Mediterranean, although it was always referred to with envy at the other two.

As Corfu is no longer a British possession, it is not worth while recording what steps we advised in regard to its defence. Our report is bound in the volume lettered "Reports on Various Subjects."

We left Corfu on the 4th July, early, by the P. and O. ss. *Valetta*, and landed at Malta at 9 P.M. next day. I stayed at Malta a week, and finally reached home on the 22nd July.

I have already alluded to the mortification I suffered by learning at Malta that my War Office appointment had been abolished. I did not at the time at all understand this unexpected catastrophe, nor indeed was it cleared up to me for more than a year, when the Report from the Select Committee on Military Organization was published. This was a Parliamentary Committee appointed in March, 1859, and which began to take evidence on the 1st April. As I had left London on the 19th March I was in ignorance of its proceedings. The Report made clear—what indeed I was well

aware of—that the Director-General of Artillery, General Cator, had long resented bitterly my confidential position near the Secretary of State for War, and that his feelings were shared by the Duke of Cambridge. H.R.H. went so far as to say :

Q. 4146. “I have every reason to believe that the cause why General Cator resigned was because his opinion as Director-General was minuted by Colonel Lefroy and overruled by him.”

A more groundless impression was never indulged, and the least inquiry into the actual conduct of business would have shown this. General Cator was President of the Ordnance Select Committee from 1855 to 1858, and it was my duty to submit the Reports of that Committee, which were in no sense his reports, to the Secretary of State. With his official duties as Director-General I had nothing whatever to do ; and I doubt if a single instance could be produced of my expressing an opinion about them. The Duke betrayed the whole secret when, in answer to a further question from Mr. Sidney Herbert, he said that my position “caused the greatest jealousy throughout the corps.”

Q. 4151. Mr. Sidney Herbert : “Is not the professional opinion of an officer, for which he is not responsible, valueless” ?—“Decidedly.”

Q. 4152. “And does it not tend to excite jealousy” ?—“Certainly, the greatest jealousy throughout the corps.”

Against such influence as this an absent man must inevitably go to the wall, and the only consolation I had was that no one had a word to say against my capacity or efficiency. On the contrary, General Peel, ex-Secretary of State (Q. 1106 and 3691), the Duke of Cambridge (Q. 4146—4153), and many others, in letters addressed to me—*e.g.*, Mr. Godley—expressed themselves in terms as complimentary as I could desire.

I am inclined to doubt whether General Cator’s feelings were as acute as was represented. I am not sure of the precise date, but about 1858 he succeeded to a large property, and would, I believe, have equally have resigned if I had never existed ; but I am not concerned to justify my position in the War Office from 1854 to 1859. It was not of my making.

I have given some reasons why it was necessary, during the independent existence of the Board of Ordnance, that the Secretary of State should have the services of an officer of artillery on his own staff. Other arrangements might have been made when the whole ordnance fell into the War Department, but they were not made. My position was a false one, and probably could not have lasted longer

than the disorganized state of the War Administration which gave it birth.

It was, however, no desire for a more coherent and logical system which caused my removal, but simple exigency caused by the following circumstances. The military duties of the Inspector-General of Fortifications and of the Director-General of Artillery were transferred to the Commander-in-Chief in 1858, and what was called a "Defence Committee" was very loosely organized, by a correspondence in "very general terms" (Q. 1053-4) without Order in Council or Warrant, to advise him. Colonel St. George, R.A., who was at that time colonel on the Staff at Malta, was, at the Duke of Cambridge's request (App. p. 577), brought home to be the Artillery member of it. It was the Duke's intention that he should be appointed a colonel on the Staff in Great Britain; but that arrangement fell through for want of Treasury sanction. The Duke then had him on his hands as member of an unpaid committee, all the other members of which received salaries in other capacities. The solution of this dilemma was to make Colonel St. George president of the Ordnance Select Committee and "adviser to the Secretary of State in artillery matters," by which my previous functions were abolished. He was to have his office in Woolwich and "a room in the office in Pall Mall." I was to be transferred, without loss of salary, to Woolwich as secretary to that committee.

It is worth while remarking that this patchwork arrangement could not, and did not, last long. Colonel St. George in turn was removed from the War Office in August, 1861, and the office of Director of Ordnance created, to which Colonel Tulloh, R.A., was appointed, the presidency of the O. S. Committee being separated from it.

The Select Committee of 1859-60 was in its composition a very strong one. Mr. Sidney Herbert, Secretary of State for War, was on it—usually chairman—Lord Panmure, General Peel (ex-Secretaries of State), Mr. Monsell (ex-clerk of the Ordnance), Sir James Graham, and eight or nine more leading members of the House of Commons were members, and they took a great deal of evidence, evincing the utmost desire to unravel the complicated skein of our then military system, with imperfect success, because there was no system but a chaos. They were greatly guided by the evidence of Sir Benjamin Hawes, Permanent Under-Secretary of State; but Hawes was a third-rate politician, who, when appointed to his office, knew nothing of military affairs, and had not a statesmanlike grasp of the subject. Hence his evidence, which is very voluminous, is very

disappointing ; but this Blue Book, as a whole, is extremely interesting, and full of information of permanent value.

I was not called upon to take up my duties as secretary to the Ordnance Select Committee at once, and in fact did not do so until February 1st, 1860, having been nominated a member of the Royal Commission on the Defences of the United Kingdom soon after my return home.

The meetings of this Commission and the attendant travelling to all the great dockyards were quite incompatible with attendances on another duty. It was a very pleasant and interesting service, for which we received two guineas a day to cover the extravagantly high bills which the hotel-keepers always managed to run up—especially for carriages. I remember that our bill at the “George,” Portsmouth, for three or four days’ stay, came to over £100.

CHAPTER XIV.

ALL this time my house and my children were in charge of Mary Robinson, who was too young and inexperienced . . . for so serious a responsibility. No one who has been so circumstanced will be surprised that my thoughts should turn to a second marriage as a necessity ; and no one who has known my present beloved wife will be surprised that they should fix on her, then residing at Boxmoor, Hemel Hempstead, the widowed daughter of my early friend, Colonel Dundas ; known to me in her girlhood ; met several times in her early widowhood ; her father's favourite child ; as good as she was winning and gentle ; not without fortune, although I had no idea that it was so large as it proved to be, and by many happy conditions into which I need not enter—her father's partiality for me being one of them—in a peculiar manner fitted to share my future life. The end of the year saw our intimacy renewed ; we were engaged in March, 1860.

The following extracts of letters to his future wife show how naturally his mind turned to the realities of the Christian life and to devout study of the Bible, and in what spirit he looked forward to a happy change in his home life.

Whether overwhelmed with his official work, harassed by its unavoidable perplexities, or enjoying a well-earned holiday, nothing turned his mind from the earnest efforts to serve God in the path to which he had been called, and to make his home what a Christian household should be—a home of cheerfulness, peace, and love.

TO HIS FUTURE WIFE.

“ Having missed two Sundays at home—the first when we received our first Communion together, I have not been sorry to have one quietly with my children, to think over my blessing and theirs, and to watch the Sunday habits of the household with your eyes. You will help me to reconcile my own rest, and outward duties, and innocent enjoyment of my children, with the spiritual improvement which none of these things ought to curtail, but they are apt to do so. I have just now been reading the story of Samuel to little

Maude before she went off to bed, and that of the Shunamite to Frazer. Did the wonderful beauty of this story ever particularly strike you? If not, read it over with a woman's heart, and expand that concentrated tale of love, joy, trial, faith, agony, and reward. Think of the passion in each sentence, 'Slack not thy riding for me except I bid thee,' and the speechless joy with which 'she took up her son and *went out*' from the awful presence of the Man of God. There is a mystery in all that Elisha says and does far exceeding, to my mind, that attaching to Elijah, and this story affects my mind more than any other. Her superiority to her husband, too. She would not even trouble him, or herself, perhaps, to tell him the truth. 'Wherefore wilt thou go to him to-day; it is neither new moon nor Sabbath.' She simply says, 'It shall be well,' and hides her fear as she does her belief. And all this really happened while Homer was living, and inventing fables, within 600 miles of the spot. Surely it is a great fault of biblical instruction to dwell so little on these points of view.

"This morning after hymn and collect, which Emmie and Frazer both say, they read with me—or rather began to read, for Ben Lefroy came in and interrupted us. Another very favourite place of mine, the 90th Psalm, the prayer of Moses the Man of God, the most ancient poem but one (Exodus xv.) in the world, and what a glorious one!—shall we not read these things together?"

TO THE SAME.

Good Friday.

"... I think of you to-day, as calmly meditating on, and trying to realise that awful scene on Calvary, as wondering over that 22nd Psalm, the shadow of it; as weighing the music and the hope of that solemn 53rd Isaiah, which seems an historic record written when agony was over, and death swallowed up in victory. Some day we shall have happy moments together, I hope, on these subjects, and I shall reap the fruits of many quiet hours and prayerful thoughts. My life has been too busy to meditate much, but I have derived great advantage from having an interleaved Bible on my writing table, and sometimes noting thoughts that occurred to me, or passages that struck me. The right observation of Lent is one of the questions in which I expect help from you. I have never succeeded in making it quite what I wish. You allude often to my helping you in the Heavenward journey, and I have many hopes and aspirations that way. I think I shall not be an impediment to you, because I have an ideal of a Christian life which I should love to see you practising, but I look for far more aid than I shall give.

“ Do you ever find that staying in other people’s houses the Sunday passes in conversation, and one may say idleness, without leaving any self-reproach in the mind ; but if other people are staying in yours, and interrupting your quiet Sunday habits in precisely the same way, you have an uneasy feeling of a Sunday lost ? I often find this, and rather do so to-day, Lyon having been with me. The thought struck me to-day at the Sacrament how, among the benefits of Christ’s Passion, may be set all which purifies and elevates the soul, as well as saves it for eternity, and so human love. Our Lord ‘loved Martha and her sister and Lazarus,’ a divine and awful love indeed.

“ I must tell you how wonderfully struck I was with a passage in Archer Butler, speaking of the uses of affliction. ‘Happy the tempest that casts its wrecks upon the shores of Paradise !’ Do you remember it ? . . . We will try, God helping us, to serve Him. A happy Christian home ours shall be by His grace, and I bless you for drawing the picture. And when death comes, and to whichever it shall first come, we will hold fast to the anchor within the veil which brings the soul home at last.”

This resolve was indeed fully carried out, and the following words, written by a lady in 1893, show how it impressed her.

“ I should like one of my children to have happy recollections of Blackheath in remembrance of my happy days there. What an ideal home that was in Grosvenor House, and an ideal Sunday. I believe you and *she* first put thoughts into my heart about Sunday that have never been obliterated.”

The failing state of Colonel Dundas’s health in the spring of this year gave great anxiety to his family, and he expressed an earnest wish to see his beloved daughter happily married before he might be summoned away. We were married accordingly in the most private manner in St. George’s Church, Hanover Square, on May 12th, and received his blessing from what proved to be his death-bed,¹ for he never left it, but died in perfect peace, in sure and certain hope, on the 25th of the same month—a gallant soldier, a wise, strong-headed man, a devout member of the Presbyterian Church, and a true and constant friend.

¹ This is not quite correct. My dear father was not confined to his bed until the 21st May, and we had spent a day with him about the 16th or 17th, when he was in the drawing-room, bright and interested in everything, but very weak.—C. A. L.

He writes to his wife's mother, Mrs. Dundas.

June 3rd, 1860.

"You must not think me too absorbed in the selfish enjoyment of my own happiness . . . not to have a thought or a minute for you. I think of you often, my dear mother, and of the stroke which has fallen upon you. I know that there is in affliction itself a hidden manna, which no one knows but those who have entered that sanctuary. That we are enabled in a certain way to share the victory and the joy of those beloved ones from whom we have parted on the brink of the river, and to hear the songs of angels which welcome them to the further shore, and I rejoice to see that a full measure of this consolation has been given to you ; but you will not the less, I know, like a few words of sympathy and affection from me now and then. 'Be of good cheer, it is I,' are words which still sound in our ears if we will hear them. 'Precious in the sight of the Lord is the death of His saints,' and if so, how much more precious those who in all ages and every dispensation He has made His peculiar care. 'A Father of the fatherless and a Judge of the widow is God in His holy habitation.' He can and will and does support you, and will do as time runs on and the cold clasp of death comes nearer, enable you to bear in mind thoughts that suggest the great consolatory truths which stand fast for ever, the hopes and promises and privileges of our high calling in Christ Jesus. Truly if a brother is born for adversity, much more that Brother, from whom no craving of the heart, no weakness, no purpose is hid. It is the nature of the soul, I believe, to acquiesce in and realise these truths, far more readily than is commonly supposed. They are very near us if we listen for them, and do not reject the comfort they are intended to impart as something which is not for us, or not for us yet. I look back with such thankfulness to the dear father having been permitted to see and rejoice in his child's happiness. I am so thankful to have enjoyed his affection and confidence, and that so many years of those favours should have been so providentially crowned by the greatest of all before his removal. Life contains many stranger things than any romance, and that such should have been the fruit of a casual meeting in a diligence twenty-three years ago is as strange as any . . . And now, God bless and be with you, and help us all to so lay out our daily lives that those who survive us may have the consolations which the death of the righteous only can bequeath."

I do not remember that the year 1860 was marked by anything very important in gunnery. We were then at the beginning of our

troubles. Armstrong, who was then superintendent of the Royal Gun Factories, was engaged in perfecting his original system of breech-loading guns, and also in an endeavour to utilize the cast-iron guns of the service by strengthening them. This experiment cost a good deal of money, and incurred a good deal of ridicule. It was entirely unsuccessful. One gun burst on the 2nd May and another on the 4th. The French had already tried to do the same thing, but had had to withdraw all the guns issued to the Navy.

My dear wife and I were unable to indulge the pleasure of a short wedding tour until the autumn. We embarked for Antwerp on the 27th September, and went thence to Rotterdam. We were only a week in Holland, but it was time enough to see Amsterdam, the Hague, Haarlem, that imposture the "clean village of Brock," and Utrecht, with most of their museums and picture galleries. One incident gave us great pleasure. Walking about what had been the Haarlem Lake, and admiring the powerful pumping machinery, still at work to keep it dry, we were struck with the handsome equipments of a large farming establishment, and asked permission to enter the yard and look round. The proprietor, M. —, who was there, most courteously offered to conduct us himself, and as he spoke excellent English, we were soon deep in topics of mutual interest. Our inspection ending by his remarking that it was now his family dinner hour, would we do him the honour of joining the party? We were of course delighted, and were duly introduced to his wife and daughter. We had an excellent plain dinner. We found that our host came to England frequently to purchase stock for his farm, and was quite at home there. He told us that the farms, in what was but a few years before the Lake, still suffered terribly from fever and ague, but he hoped it would wear out in time. It was most remarkable that nothing whatever of historical or antiquarian interest had been found, not a relic of the sea-fights known to have occurred there. The "ooze and bottom of the sea" had swallowed them all.

We found the Hôtel des Pays-bas at Utrecht quite exceptional for its comfort. Being so late in the autumn, there were very few visitors, but one of them excited our curiosity a good deal: he was a little active, vivacious man, of extremely distinguished appearance and manner, who dined near us *en prince*, but did not keep himself at all aloof, joining readily in conversation. He was just such a man as I imagine Baron Stockmar to have been, and has always been since associated with him in my mind. We left early next morning (at 6), and I forgot to find out who he was.

The only thing we really saw in Utrecht was the unfinished

cathedral, of which the great west tower and the choir alone represent the vast structure it might have been but for the Reformation. The choir is now a Dutch Reformed Church, with a pulpit in the centre and pews arranged round it in circles. The noble tower commands a very extensive panorama, and was long remembered for a remarkable conversation between my beloved wife and the pretty Dutch maiden who was our *cicerone*, neither knowing a word of the language of the other. However, by mispronouncing English and throwing in a few German words, the former managed to make herself understood, and she placed her own interpretation on the answers.

We left Utrecht on the 6th October for Cologne by way of Arnheim, Oberhausen and Düsseldorf, and this was the limit of the excursion. We returned through Belgium by way of Ostende, but did not go direct home. The Turners of Rooksnest had most kindly invited us to go there, and I gladly introduced my dear Annie to that hospitable family and splendid house. I think we found Augustus Franks and the late Rhode Hawkins our fellow visitors, with Mr. Wigram, who was a nephew of Mrs. Turner. My daughter Emmie and Mrs. Paterson met us.

Rapid as our tour was, we found time, thanks to the very limited stage on which so many great historical scenes were enacted in the Middle Ages, to visit Aix-le-Chapelle, Liège Spa, Louvain, Malines, Brussels and Ghent, before we reached Ostende, and at each of them saw what is most remarkable.

In this year Fleet Church was begun, to which my brother Charles gave £300 and 200,000 bricks, having a large brickfield of his own. The patronage was vested in him in perpetuity by deed, which I witnessed on the 23rd October. He was fortunate enough to find a clergyman of independent means, Mr. Plummer, who took it with the normal stipend of £20, and a house worth about £950, the beginning of which was a cottage which my brother bought, with two acres of ground, for £250, and had laid out about as much more upon it. Plummer did the rest. The church was to cost under £2,000.

On leaving the War Office I had, to be nearer my work, given up my house in Cambridge Terrace and taken one at Blackheath, 1, Woodlands Terrace; this we gave up before the end of the year, and moved to a better one, Grosvenor House, where we resided down to 1868.

Here on January 8th, 1861, very suddenly and unexpectedly, died my dear wife's mother, Mrs. Dundas, only surviving her husband

seven months. She was an accomplished artist, a woman of true piety, of a most happy disposition, and she was truly mourned by us and by all her family.

The death of my dear brother Charles on April 17th, 1861, is recorded in the family book. I will not here enlarge upon it. It devolved on me the responsibility of becoming joint administrator of his estate, and guardian of his two sons.

The Ordnance Select Committee as reconstituted in 1859 was a much smaller body than the preceding committee as constituted by the Duke of Newcastle ; and if the members, who were all paid, had attended at the office daily, and had given their whole time and attention to their duties, as is expected of members of the Civil Service, it might have been an efficient committee, barring the fact that the individuals were not all men of any obvious ability ; but they were not in express terms required by the War Office instructions to do so. They met as a committee three times a week, and on some of the intermediate days, but not very many were required to attend experiments at Shoeburyness or elsewhere. The rest of the time they considered their own. On the days of meeting in committee they dispersed the moment the sitting was over, the president and vice-president being the first to rush off to London ; and they left the secretary to deal with the business and embody their decisions in reports. It was very rarely that any member drafted a report, or aided in doing so ; the president never. Captain Heyman, however, as assistant secretary, took his full share of work. It may seem invidious to record all this, but it is the simple truth ; and as I differed very widely from my colleagues in my views of duty, and incurred extreme unpopularity when I became president in 1864 by insisting on a daily attendance, which was then also for the first time required by the "Rules for the Guidance of the O. S. C." laid down by Lord Hartington, I wish my views to be placed on record. Much of the low esteem in which the committee was unfortunately held would, I am confident, have been saved if there had been more palpable evidence of energy and competence on the part of its members.

I do not propose to refer in any detail to the business of the O. S. Committee during my connection with it. Very little of it had any permanent interest. I have a great mass of material available for writing the history of it, if anyone is bold enough to undertake the task. But I refer to a few of the more important experiments carried out by it, as such things are soon forgotten, and they help to trace the progress of the great revolution in artillery, which worked itself out in those and the few succeeding years. I say "worked itself out,"

for anything more apparently unguided it would be difficult to name ; but of this, more below.

First, then, I recall the experimental practice against Martello Tower No. 71, near Eastbourne, in September, 1860, with rifled guns, followed in January, 1861, by practice against Tower No. 49 with smooth-bored guns, two 68-pounders and two 32-pounders. The distance was in both cases 1,032 yards. The towers were built in 1804, and presented the most solid possible brickwork, from 7 feet 6 inches to 5 feet 9 inches thick. It is needless to say that the rifled battery had an enormous advantage,¹ and every shot was watched by a great concourse of people with intense interest. The Commander-in-Chief attended, and many officers. The O.S.C. was at this time very much plagued by an enthusiast named Gehl, who had a craze about rendering gunpowder inexplosive by mixing with it a large quantity of finely-powdered glass, which he said could be readily separated by sifting when the powder was required for use. Strange to say, he was taken up by the Queen, and through Court influence got trial after trial ; of these, the last was at Martello Tower No. 41. We were to try whether shot or shell going into a magazine of powder thus protected would blow it up. It had no effect. We went so far at last as to thrust lighted matches into a barrel of it, and to throw one of them on to a bonfire. Nothing would explode it, because practically the barrels were all powdered glass, each grain of gunpowder being so isolated from its nearest neighbour that its ignition did not affect them. But on other grounds the plan was an illusion, and with difficulty we got rid of Mr. Gehl.

A very interesting experiment of this year was the employment of naphtha on a large scale to burn an enemy's shipping, or to drive his men away from their guns, whether in a ship or fortress, by its dense, suffocating smoke. It was tried on September 24th with considerable success, the film of naphtha being ignited by pellets of potassium fired in a shell to burst over the water. Granted a narrow channel, a wind and tide in the right direction, and a harbour or anchorage full of wooden shipping, it might be employed with very destructive effects. Lord Dundonald's celebrated "secret" was something of the same nature ; but in these days of iron vessels, the occasion for using it is never likely to arise.

It was not at this date settled to everybody's satisfaction that the cast-iron guns of the service could not be rifled. So the Government permitted seven or eight private persons, all but one civilians, and

¹ See the reports in Vol. "Miscellaneous," chiefly O.S.C.

entirely without experience, each to have a 32-pounder gun rifled for him, to his own fancy ; and conducted a long and expensive competitive trial, which led to no useful result, except to prove that cast iron was very unsafe. I refer to the matter as a good illustration of the extraordinary things that occur under our system of government. Armstrong, the engineer for rifled ordnance, put a shunt-rifled gun in for trial of that mode of rifling in September, 1861, but otherwise was not consulted. No conditions were laid down to make the results fairly comparable. That would have been an interference !

We took our holiday this year in Scotland, whence, however, I was summoned on August 23rd to attend the funeral of my mother at Odiham, returning on the 28th. We were most of the time at Carron Hall, but visited Kingsdale in Fife, then tenanted by Annie's first cousin, Tom Bruce of Arnot, a house to which we paid many happy visits. He was a retired Indian civilian, a man of joyous, happy temperament, a strong Tory in his opinions, but wise and reflective and high-principled in everything. He knew how to make his house always lively and agreeable.

On our way home we paid a short visit to the Carrick Buchanans at Drumpellier, in Lanark. Colonel C. Buchanan is one of the survivors of the immortal charge of the Heavy Brigade at Balaclava in 1854. A more modest hero it would be difficult to find. His amiable and excellent wife is the eldest daughter of Anthony Lefroy, now of Carriglas. Drumpellier was already so hemmed in by collieries and ironworks that I do not imagine it will long descend as a gentleman's mansion ; it was, however, a very fine place.

In one of our experiments this year, one of the competitors in rifled guns—I think it was Mr. Hadden—rather impudently challenged the accuracy with which the range sergeants measured the distances over or under the mark by the use of a rod as they walked along ; so I caused a number to be re-measured with the tape. The result was that the sergeants' measures were rather too short in the proportion of $\frac{2}{3} \frac{2}{3} \frac{6}{6}$, a quantity of very little consequence, as great precision would have very much prolonged the time. I think Mr. Hadden was quite satisfied ; it was as fair for one as another.

The Admiralty in July sent an old 42-gun frigate, *The Hussar*, to Shoeburyness, as a *corpus vilum*, on which to try the effect of shells. They were 7-inch or 100-pounder common shells with Pillar, Moorsom, or Pittman percussion fuses, and knocked the ship to pieces in a very few rounds, but she was also set on fire and allowed to burn out.

This was the first year of experimental targets. A number of rival inventors proposed combinations of wood and iron to set shells at defiance, and very large sums must have been spent in erecting and trying them. This was probably inevitable; everything was in its infancy.

It was also the beginning of military signalling. I remember an exchange of Captain Bolton's flashing signals with Sheerness, when F. Campbell, who was, or pretended to be, incredulous of the reality of the conversation, signalled, "Is Dick Jones at Sheerness?" The reply came, "No, he is at Woolwich." "It's all right," said Campbell, "I know he went home to-day."

Captain, afterwards Sir Francis, Bolton was a very fine fellow. He had the misfortune of a bar sinister on his escutcheon, and had enlisted in the Artillery, where he rose to be a sergeant-major, and took his discharge while still quite a young man. He then took up scientific pursuits, and was at one time water-analyst for London. The very brilliant displays of the electric light at the Kensington Exhibitions of 1883 and following years were managed by him. In appearance, bearing, and address he was most emphatically a gentleman. His private history I never heard, or how he came by his military rank after having served in the ranks. He was knighted, I think, for his services at Kensington.

In a letter to his wife, written during one of these professional absences, he mentions a case of minute red-tape economy, which could be also illustrated from his own experience. He says:—

"Yesterday's dinner only produced one anecdote that I can remember. Anderson lately charged sixpence in his accounts for a Bradshaw. The accounts, you must know, were for many thousand pounds. It was disallowed. Thinking there was a mistake, he charged it next time to a different head. Still it was disallowed. Having to send two men here for this experiment of ours, he actually telegraphed to the War Office for authority to purchase a Bradshaw, and in due time got a formal authority to do so. 'I was determined to know officially what time the train starts,' said Anderson, with a grin."

The outbreak of the American Civil War in April, 1861, and the uncertainty whether we could avoid a rupture, gave much stimulus to experimental gunnery from 1861 to 1865.

Among the gentlemen who came before the O.S.C this year was a M. de Bourbon, a lieutenant in the Dutch artillery. He had some small gunnery improvements; he claimed to be a grandson of the

lost Dauphin—I do not know upon what grounds—but I did not discover any trace of royalty about him.

This year we again went to Scotland, sending our children to Eastbourne. We visited at Newcastle and Cragside, Carron Hall and Gilmerton, and were absent a month.

Sir John Beverley Robinson died on January 31st, æt. 72. By far the most eminent Canadian of his generation, he could not have failed to have risen to the highest distinction in any sphere; but he was satisfied with the service of his own country, and when pressed by Lord Bathurst to enter the British Parliament he declined the glittering offer.

He died more honoured and more beloved than any public man in Canada ever was before, or is ever likely to be hereafter, now that public life has assured national proportions in the colony, and the honours of the Bench of Ontario are shared by three Chief Justices.

Prince Arthur, Duke of Connaught, a boy of thirteen, was residing at this time at the Ranger's House, Greenwich Park, under the tutelage of Lieut.-Colonel (now Sir Howard) Elphinstone, R.E. Both my boys, Harry and Frazer, used now and then in their holidays to spend a happy day with him. I dined there pretty frequently, and he several times honoured our house. He was an extremely nice boy, as natural and simple as possible.

Having got very much out of health from overwork, my dear wife took me down to Weymouth in June, where we passed a happy and idle fortnight yachting about the delightful bay, drinking an immense quantity of port wine, and reading Sir Charles Grandison and other light literature. The result was that I returned to Woolwich quite set up.

My sister-in-law, Annette Lefroy, and four of her children arrived from Australia on August 19th.

Our autumn holiday was on the Continent, and was one of those to which I look back with the greatest pleasure. We left home on the 7th September for Metz, then, of course, French territory. The great attraction was the cathedral, which escaped the ravages of the French Revolution in a remarkable manner, and contains some unique sculptures. The building was desecrated in the revolutionary madness, and was rented for the municipality by the contractor for the supply of forage to the armies of the Rhine. He, being in secret a good friend of the church, kept it crammed with hay and straw, and by excluding strangers was enabled to preserve it almost uninjured until better days arrived.

There is a magnificent Roman bath cut out of one solid block of red Egyptian porphyry, now used, or professedly used, for baptisms by immersion. It was found three or four centuries ago in the ruins of the Palace, and gives a great idea of the means of transportation enjoyed by the Romans, as well as of the wealth and luxury of their provincial officers.

I do not remember how, but I made the acquaintance here of General Susanne, not long afterwards Minister for War; a very amiable and agreeable person, and by his favour visited the arsenal and other military establishments. He showed me an enormous ancient cannon, "Der Griffe," and congratulated himself that they could not get it to Paris, being too heavy to pass safely over the bridges. However, this difficulty has been since overcome, and it is now in Paris, not at Berlin. General Bourbaki was the commandant.

Our next stage was Basle, thence by way of Zürich to Lucerne, stopping at the Righi. We had two charming Russian ladies as fellow-travellers one day, who spoke English perfectly. By way of joke, I put together half a dozen consonants and a vowel or two sprinkled with X's and Z's, and gravely asked the meaning of that *Russian* word. The elder lady looked at it for a moment, then replied, "Ce n'est pas un mot Russe; c'est un mot Polonais!"

We made the acquaintance at Zürich of Dr. F. Keller, the learned antiquary, and visited the museum under his auspices. He was the great authority regarding the Lake dwellings, which had then been recently discovered. By his advice we made a delightful excursion on the 16th September to a place called Robenhausen, near Witzikon, where the proprietor of one of the sites, Jakob Messikomer, gave us a most friendly reception and even offered us dinner. I bought the small but good collection of objects I have from him. It includes a broken stone axe that we found ourselves. The objects were found lying on the flat sandy bottom of what was once a lake, under eight feet or so of peat. Messikomer thought that the peat grew at the rate of about one foot a century, but this of course is no criterion of the time elapsed since these dwellings were inhabited, which is very variously estimated. Dr. Keller thought from 6,000 to 8,000 years, but some, as at Abbeville, are much more ancient, and others comparatively modern. Bronze objects as fine as any in the Danish museums have been found in the Biebersee; and generally the advanced state of the arts, the number of animals domesticated, the number of fruits and cereals cultivated, all tend to prove that some of the settlements came down to historic times. Nothing, however, of late date has

been found at Robenhausen—only polished stone, woven fabrics, and deer's horn implements.

I spent some hours very agreeably in the arsenal at Zürich, and afterwards embodied the result of my observations in a paper printed in the *Archæological Journal*, Vol. XXV. (1868, p. 139).

We were unfortunate at the Righi. The valleys at sunrise were all in cloud, only a very few snowy peaks appeared above it.

At Lucerne visited another arsenal. We left this delightful spot for the Grimsel on the 20th September, and slept at Im Hof. It was the night of the year when a great rural festival is held on the occasion of the flocks and herds coming down from the mountain pastures to the valleys. The inn was crowded with swains and shepherdesses in their gala dress, and they kept up their festivities to near daylight. When they were not dancing they were singing or eating supper. Such beautiful *jodeling* I never heard before or since. We were very tired, but, as sleep was out of the question, we asked permission to witness the gaiety; there were only two other visitors, and they accompanied us. The saloon where the dancing was going on was thick with tobacco-smoke, and most of the gentlemen were in their shirt-sleeves; but good manners were observed, and we were courteously invited to join. A short time in such an atmosphere was enough, and we soon retired. When I looked out at daylight a little romping was going on among departing swains and their sweethearts, but I don't think there was the least impropriety. It was altogether a very pleasant incident.

Hiring a guide here and a couple of horses, we rode on to Handeek, where we were detained a little time by snow; then proceeded to the Grimsel, and reached it about half-past 3 in very bad weather. I think we were the only guests. Next morning, September 23rd, so much snow had fallen that the ascent to the pass was not without difficulty. We left the hotel at 7.35, reached the summit at 8.45, and the Rhone glacier on the other side at 9.55. Annie was walking all the way. We were so thoroughly wet through by the snow that there was nothing for it but to go to bed until our clothes were dried. At 2 P.M. we resumed our journey, still on foot, to Viesch, but luckily picked up a carriage by the way. Still, my dear wife was greatly over-fatigued, to which I attributed an illness at Lausanne on the 27th. From Viesch we drove next day to the foot of the Eggischhorn, and were lucky enough to meet the hotel-keeper with his key in his pocket descending the mountain, having closed the house! However, he readily agreed to return and re-open it for us. It was cheerless enough, and as the mountain was

enveloped in cloud, and there was no sign of improvement in the weather, we left next day.

We arrived early enough for me to get to the top of the mountain, 9,600 feet, by a very easy ascent, but I saw nothing. (P.S.—No : this was the next morning, September 25th.)

September 25th.—Slept at Briez.

September 26th.—Reached Lausanne, Hôtel Gibbon, where we were both laid up. The next day was Sunday, which was spent in bed.

September 28th.—Took the railway to Thun, and on next day to Interlachen.

October 1st.—To Berne. We were in a delightful hotel at Berne, the first at which I found electric bells—the Bernerhoff—more comfortable and quietly luxurious than any I had then been in.

Here again I was much interested in the Zughaus, or arsenal, a place ordinary tourists never think of visiting (see my paper in *Archæological Journal*).

We left Berne for Neuchâtel on the 2nd October, and thence travelled home by Pontarlier, Dôle, and Dijon to Paris, thence by Amiens, and we reached Blackheath at half-past ten on the 7th October. Leave up on the 13th.

Rather an interesting ceremony occurred on the 2nd November—the consecration of Woolwich Garrison Church. Our friend Colonel, now Sir Richard, Wilbraham accompanied us.

There are few official acts of mine to which I look back with greater pleasure than having in October, 1863, induced Earl de Grey to take the unusual step (for the War Office) of offering an honorarium of £500 to Major Navez, of the Belgian Artillery, in recognition of the advantage the British Artillery had derived from the use of his elegant electro-ballistic apparatus.

The opportunity was found in this way. Lieut. W. H. Noble completed in 1863 his first report on the electro-ballistic experiments which he had made, and this, together with a previous report of Captain Andrew Noble (1860), was presented to Navez ; but, as I pointed out, this proper compliment was by no means an adequate recognition of Navez's merits, or of the obligation artillery science was under to him. I proposed that in addition he should be offered as an acknowledgment a sum of £500. St. George concurred, and recommended it to Tulloh, Tulloh to Lord Hartington, Lord Hartington to Earl de Grey, who approved on the 27th October. Thus in less than a fortnight the thing was settled without a word of dissent from any quarter ; and I took care to draft a handsome letter, which was, I imagine, sent, but I did not see it.

I do not find anything particularly memorable in the gunnery experiments of the year, except the competition between Whitworth and Armstrong, which was not carried on before the Ordnance Select Committee, but before a special mixed committee, under an infantry officer (by no means a brilliant one), and included two eminent civil engineers, Mr. W. Pole and Mr. Penn. The latter retired, and Mr. Macdonald was (*at Whitworth's request*) appointed in his place. This gentleman was intimately connected with the *Times* newspaper, which gives a clue to the strong line taken by that influential periodical for several years against Armstrong and in favour of Whitworth.¹ Mr. Pole also retired six months before the date of the report (3rd August, 1865), and was succeeded by Mr. Stuart Rendel, who was much connected with the Armstrong firm.

The trial dragged its weary length two and a half years, and ended in smoke. The committee resolved nothing, and merely reported a mass of conflicting evidence and (to the House of Commons) unintelligible experiments at a heavy cost.

Sir George Cornwall Lewis, by whom the Whitworth and Armstrong committee was appointed, was succeeded in 1868 by Earl de Grey (now Marquis of Ripon). Perplexed, as I presume, by the complication of gunnery questions, he sent for me towards the end of November for a conference on the subject. I have preserved no note of it, but it was one step in a series of changes which he was advised, as I imagine by Sir Edward Lugard, to make.

On the 11th December, 1863, Colonel Tulloh retired from his office of Director of Ordnance, and was rewarded with the Companionship of the Bath. Colonel St. George succeeded him, and I was appointed president of the Ordnance Select Committee, with the rank of Brigadier-General, on the 15th January, 1864. I was actually senior in rank to all the members, and, though there was a certain awkwardness about it, they behaved like gentlemen; but I did not escape that jealousy which attends nearly all advancements by selection. Though the rank was only temporary, "while serving as president," it put me for the moment above a certain number of my seniors, whose feelings were doubtless expressed by my old friend Sir Richard Dacres, when he said in his blunt way, "You know, my dear Lefroy, there's nobody who has more regard for you than I have, or thinks more highly of you. They might have made you a K.C.B. and welcome, but military rank ——" a shake of the head completed the sentence. However, we remained as good friends as before. I

¹ He was manager of the *Times* at his death in December, 1889.

grieve to say that another very old friend — took it more to heart, and in many little ways I was made to feel his soreness. I can only say that they never altered the feelings of admiration and regard I entertained towards him, or the conviction I had and have, that his was a very noble character.

The change of position made little difference in my work. I continued to draft most of the reports of the committee, and attended at the office daily, as I thought all the members ought to do. Captain Heyman continued as secretary to perform much the same duties as before, and Lient. W. H. Noble continued in charge of the ballistic experiments.

We gave a family dinner party on my birthday, and I mention it as, I think, the last occasion on which I saw my honoured old guardian James Quilter. He dined with us. As he was stone-deaf, I gave him in writing what I intended to say in proposing his health. He made a most touching reply. He died the December following.

On the 10th May I dined with Mr. Christie, of the Christie Museum, *dans son métier* a Hatter. The party included Bishop Colenso, Panizzi, George Scharf, Sir W. Grove, James Fergusson, Tipping, and more whose names I did not not note, Augustus Franks no doubt. My sympathies were not at all with Colenso, and I could but pity a bishop whom no clergyman was asked to meet, and who was shunned by all his episcopal brethren.

May 28th.—Tried my strength at the Crystal Palace; could only lift 350 lbs., and strike a blow of 170 lbs., the normal being 430 lbs. and 280 lbs.

We took our holiday in Scotland with the children, a party of nine, visiting (with two of the children) Carron Hall, the Campbells of Inverrardoch, etc.

It was of course impossible to take such a party to friends' houses. We established the governess and younger children in lodgings in Edinburgh, and afterwards at the Bridge of Allan.

On the 18th August we started with the two boys for the Caledonian Canal, and reached Knockie, where my friend Colonel Shafto Adair, afterwards Lord Waveney, had a shooting box. It was, barring wet, a delightful excursion. Gordon Cumming, a mighty hunter, famous in his day, had established his well-known museum of South African trophies of the chase at one of the locks of the Caledonian Canal, and levied a shilling upon almost everybody that passed. He wore an *ultra* Highland costume, and from his stature and swagger was very conspicuous.

August 24th.—We went on to Dumphail, near Inverness, Mr. Cumming

Bruce's place, now I suppose descended to his grand-daughter, Lady Thurlow. It is by tradition the last place in Scotland where a wolf was killed. At Altyre, a neighbouring seat, I saw a "Poirá" tree (*Amelanchier ovalis*), the only one I ever saw in Great Britain. It is an American plant, the berries of which are used in making berry pemmican. They did not know what it was.

The Altyre armilla is a very famous object of antiquity, often engraved—Scandinavian ; we saw it and several others found in the neighbourhood.

August 27th.—We reached the Bruces of Arnot (Kingsdale, Fife), thence for a few days to Carron Hall again, and home on the 7th September. We spent three very happy days with the Andrew Nobles at Jesmond on our way.

I completed this summer the Catalogue of the Rotunda, of which 2,500 copies were printed for sale, and had the pleasure of receiving the thanks of Lord de Grey, whose attention was specially called to it by General St. George.

"The army and the public are much indebted to Brigadier-General Lefroy for the labour he has bestowed on the preparation of this Catalogue.

"(Signed) DE G.

"15th May, 1864."

I could never have done it had I not engaged at this time a private secretary, a young man named McGrath, son of old Sergeant McGrath, who for many years managed Sabine's office.

Having tried systems of rifling in cast-iron guns, which could only fire small charges, an indulgent Government repeated the trial in expensive wrought-iron ones. It was still the right hand against the left.

TO F. EARDLEY-WILMOT.

22nd March, 1864.

"The great trial between Whitworth and Armstrong begins after Easter, and at the same time, but without connection, we try four systems of rifling in 7-inch guns of $7\frac{1}{2}$ tons ; beautiful guns to look at. The systems are, Lancaster, Britten, Scott, and the French. The shunt is excluded. The French will, I think, win ; but when all is done, nothing will be settled, because Whitworth and Armstrong cannot be set aside until they have been tried under the same conditions. Never was such a mull in this world, thanks to Parliamentary government and a free Press."

The most interesting perhaps of this year's experiments were those with Armstrong's first 23-ton gun (13.2-inch), which had been a year at Shoeburyness. It was delivered in March, 1863, and as far exceeded all previous efforts in building up guns as it was itself destined to be exceeded in the next twenty years by guns of 80, 100, even 110 tons. As a model it was never adopted.

Printed instructions, "Rules for the Guidance of the Ordnance Select Committee," were issued in the form of a War Office circular memorandum (No. 6) in August, and distinctly laid down that the members should "attend daily at the office unless otherwise officially engaged." They were renewed in February, 1867, with the same clause; but down to the abolition of the committee in December, 1868, the object had been but imperfectly attained. The chief obstacle was the then vice-president, representing the navy—a country gentleman of fortune residing near Dorking. He appealed against the rule, instead of accepting it and showing grounds for exemption. He withdrew his appeal on finding me supported by the War Office; but never acquiesced. My ideal of such a committee was one of which the members should reside in or near Woolwich, and go to their office daily as much as a matter of course as a staff officer goes to his. If they found nothing to do, they might go away again. This has never been realized.

My views are expressed at length in a minute on Captain ——'s appeal, which is among my papers. Another remonstrance emanated from Shoeburyness. The commandant took alarm on finding that he was liable—he an officer serving under the Commander-in-Chief—to receive "Instructions" from the President of the Ordnance Select Committee. It was pointed out to him that he was only so liable in his secondary capacity of "Superintendent of the Experimental Establishment," with which in those days the Commander-in-Chief had nothing to do. This settled the question; but it serves to illustrate one result of the dual system in our Army administration, by which the rank of officers is not recognized: they are, in fact, regarded as civilians, although discharging distinctly military duties, so long as those duties are under the Minister for War, a civil functionary.

I ought to have mentioned that in February, 1864, I drew up a short statement of the then state of the question of rifling guns, which can be referred to, as it was printed; but the new instructions of the President of the Ordnance Select Committee required him to make an annual report to the Secretary of State "stating briefly the inquiries in which the committee had been engaged, and the progress

of practical artillery, whether as regards the land or sea service." This accordingly I did for four consecutive years, and the first, which extends to sixty-two printed pages folio, is dated 18th April, 1865. It was an immense labour for no adequate advantage. The War Office did not want the information, and it was not laid before Parliament. The reports are useful historically now, and that is all.

CHAPTER XV.

ON April 27th we were present at the marriage of Eleanor Bruce with John Wilkie of Foulden, having gone to Kingsdale for that purpose. This event gave us to the end of *his* life another happy and hospitable place of enjoyment in Scotland. Little did any of those present at the ceremony foresee that she would long predecease him. She died, leaving five children, in 1872. John Wilkie died under our roof in London very suddenly on the 21st June, 1884, æt. 78. He was perhaps the only individual who, as a member of the Royal Bodyguard in Scotland, the Scottish Archers, paraded before George IV. on his memorable visit to Edinburgh in 1822, and before Queen Victoria in 1870. When the circumstance was pointed out to the Queen, she took a very gracious interest in him, and soon after conferred on him the rank of Brigadier-General.

Universally known as "John Wilkie," he united simplicity, shrewdness, and benevolence to a remarkable degree, with a quiet, genial, social way that won the regard of everybody. His constitutional shyness was extreme, but it diminished after marriage. When he took his bride home his old housekeeper met her on the threshold with the keys on a cushion, an illustration of the old-fashioned atmosphere that pervaded it. Few marriages were ever happier.

On the 22nd May died my dear mother-in-law, Emma, Lady Robinson, æt. 72. Chastened by much domestic affliction towards the evening of a life of singular brightness and prosperity, she was glad to go home, where so many whom she loved had gone before. I can never recall her without a sense of affectionate regret. Her funeral was marked by an incident which shows the extremes to which religious perversion can lead a man. One of her near relations, who had joined the Plymouth Brethren, refused to attend, because she was buried according to the rites of the Church of England and in consecrated ground.

The following anecdote of Sir Charles Gordon was related to me by his brother, afterwards Sir Henry Gordon :—

"Gordon took a prisoner one of Chang-Wang's bodyguard, who defended himself desperately, and was overpowered with great difficulty.

He was wearing a yellow tunic, which is an imperial livery and aggravated his treason. The Futai wanted to hit his head off at once. 'No,' said Gordon, 'I won't have that,' and he kept him in safe custody out of the Futai's reach until he could attend to him. In good time he sent for him in presence of his own bodyguard, every man of them ex-rebels, and asked whether if he let him off anybody would be security for him (all those men were securities for one another). They shook their heads; he was 'too much bad,' and made the gesture of cutting his throat. Gordon looked at the man, and presently said, 'You will none of you be his security; then I will be his security'; and he released him.

"The next day an English rifle and forty rounds were put into his hand, and Gordon took him out with one other Chinaman as his guard reconnoitring. The man might have deserted or shot him half a dozen times; he did neither, but followed him faithfully, and became one of his most reliable attendants, and at the disbanding of the forces he returned to his village with some £200 in his pocket."

August 1st.—I attended a meeting of the Archæological Institute at Dorchester (see Vol. XXII. of the Journal). Lord Neaves, a man of great wit and readiness, was chairman; and in the company was the Bishop of Oxford (Wilberforce). One day, after an admirably witty and clever speech by the Bishop, Lord Neaves determined, in a spirit of mischief, to get him on his legs again—a most unfair proceeding; but he set to work, and by pertinacity and banter drove the Bishop into such a corner that he had to rise. Wonderful to relate, this second speech was even better and wittier than the first, and the storm of applause that followed must have been extremely gratifying to him. This was a very enjoyable little holiday. Among other excursions was one to Canford Manor, the splendid seat of Sir Ivor Guest, remarkable as possessing some of the finest sculptures recovered by Layard at Nineveh, objects that no one would expect to find in a private house. They were presented by him to Lady Charlotte Schreiber, who had contributed liberally to his expenses.

We also went to Wimborne, Sherborne, and numerous other places of interest, where such men as Professor Willis, Rev. C. W. Bingham, Beresford-Hope, Edward Freeman, J. Parker were ever ready to pour out the floods of their historical and archæological knowledge. It was at Sherborne that, after a lecture by Professor Willis on the architectural features of the church, I overheard one of his audience, a gentleman by his dress, say to his friend, "I say, Purvis, what

does he mean by talking so much about 'This is Perpendicular ; that is Perpendicular ?' Arn't all churches npright ? "

After these excursions, which were often long and fatiguing, some of us used to assemble, if there were no evening meeting, in the brick-floored parlour of the little inn where we put up. There, with long clay pipes and a comforting glass, would begin endless discussions. I remember one conversation, in which Parker was the chief speaker, on the word "spem," which frequently occurs in mediæval descriptions of Rome, and was supposed to refer to some Temple of Hope, which nobody could ever find or locate. Parker referred to the .MS., and found it was always written "spē," an abbreviation for "spetum," a conduit or sewer ; which did away with the temple and removed all difficulty.

I noticed at Sherborne Minster that the lightning conductor was broken off about five feet from the ground, and I addressed a polite note, as an F.R.S., to the Dean, calling his attention to this state of things, and pointing out the great danger to the fabric if it ever should be struck by lightning. His reply was characteristic. It had been in that state as long as he had known the church ! He was not going to meddle with it !

The following passages from letters to his wife give further details of this archæological gathering, which he so thoroughly enjoyed and appreciated :—

September 2nd.—"We had a very learned *vivâ voce* discourse last night from Mr. Parker on Christian art in Rome, where he spent last year. He affirmed what one often sees stated, that a deplorable process of destruction is going on. He thinks the works in the Catacombs much less early than they are represented, but made the remark, which was new to me, that in Rome, and Rome only, are churches, anterior to the eleventh century, to be found in a perfect state, and in great numbers. . . ."

September 3rd.—"We had a very pleasant day yesterday. The Mai-dun Castle is the most wonderful earthwork I have ever seen. Taking advantage of a steep natural bluff, the Britons, probably ages before the Christian era, excavated ditches, throwing the earth up on the slope until in one place it is 115 feet high. The place is of great extent, forty-five acres with the enclosure, but 115 acres if all the exterior lines are included. I was called upon, as a military man, to make a speech ! and did it to the undisguised admiration and delight of *one* lady, with whom also I am now going to dine. I have picked up numerous acquaintances ; among them Lord Neaves,

his wife and daughter ; another is Mr. Joyce, Anthony's friend, who is now excavating Silchester—a nice fellow.

“ We had a most interesting visit to Sherborne to-day ; such a noble church, restored within twenty years at a cost of some £45,000. Professor Willis gave us a lecture on the church, which I will give you second-hand, because the lady is waiting dinner.”

September 4th.—“ We had a conversazione in the Museum last evening, when the Rev. Mr. Barnes read some poems, in the Devonshire dialect, of his own composition ; very good poetry, but hardly intelligible. After that I betook me to the inn, and called for hot brandy-and-water in the small coffee-room, which happened at the moment to be empty. Presently enters the Rev. Dr. Jones, of Llanberis, one of the vice-presidents of the Cambrian Society ; encouraged by example, his reverence ordered whisky. Then dropped in Mr. Parker, canon of Wells, very learned in archæology ; Dr. Dyke, of Oxford, and three or four more, who generally preferred my refreshment, and we talked till twelve. I can't tell you how pleasant it was.

“ It was rational talk—what some would call learned talk, Parker being chief spokesman, but everyone throwing in something. He told us of his purchase and restoration of a fourteenth century house at Wells. Someone mentioned that in some of the Polynesian Islands they had been obliged to substitute the word ‘ pig ’ for ‘ lamb ’ in many passages of Scripture, the natives being unacquainted with the latter animal. I mentioned the Cree version of the Lord's Prayer, ‘ Give us this day our daily *fish*. ’ Then got up a discussion as to the exact word used by our Lord, and its right translation, and, strange to say, no one was quite sure of the words in either Greek or Latin : at least, there were more versions given by a good many than are in the Gospels or Vulgate. Then we got upon some points of the Roman controversy, especially the second Commandment. This, observe, whilst most of the party were smoking or sipping something comfortable. I wanted my wife in a corner, to listen and look up.

“ The museum contains many very interesting things. Among them a diptych of the fifteenth century, by Memlin, an artist of whom I never heard ; but it is a most beautiful work, exhibited by Mr. Russell, clergyman, of Greenhithe, who, it seems, is a great collector. There are some exquisite ornaments from Pompeii, and a lady's mirror, with the Judgment of Paris at the back, in the most perfect state as to form, but, of course, corroded ; some exquisite lace ; a number of costly Elizabethan dresses ; the Prince of Wales'

torques ; British gold ring money ; a very nice collection got this year at Robenhausen from the Lake dwellings, but not so good as thine, except in having such a quantity of wheat ; a most beautiful case of enamels ; very few arms, and those bad—but my drawings of arms were much admired ; curious old books and missals in quantities, and, of course, a profusion of Roman remains, with which this country abounds. We were lunched yesterday at Sherborne Castle by Mr. Wyat, and got two speeches out of the Bishop of Oxford. I never heard anything happier.

“To-day I took a boat to Portland ; saw everything. The party consisted of Lord Campden, Mr. Sheridan and his sister, Lady Gifford, Archdeacon Huxtable, Cyril Graham, and a few more. We got back about half-past 5, and who should I meet on landing but the original of Gibson’s Venus ! Mrs. —, with Sir R. Kirby, and Purnell, the secretary. Finding the lady bent upon a sail, but afraid to take old Sir R., I started again, and made a second tour of the fleet, and have just let my cutlet get cold to close this for 8 P.M. post.”

The next day he returned home. The diary continues :—

On September 14th we started for the Continent, *via* Antwerp. Mary Lefroy (now Mary Mead) and Emily accompanied us.

We travelled by way of Mayence, Heidelberg, and Friburg to Schaffhausen ; thence by Zürich to Chur. I don’t think that many tourists, out of the many thousands who pass through this little town annually to the Via Mala, find out the many treasures of art and archæology that are to be seen in the old cathedral.

We took a carriage at Chur to carry us to Chiavenna, and slept at the top of the mountain ; but the weather was against us, and we were heartily glad to get into warmth and sunshine on the Italian side. The next day was Sunday. I hope Emily has not forgotten our climb up an interminable stair of many hundred feet to the top of the mountain.

From Chiavenna we took a carriage to Colico, and thence went by boat to Bellagio. In this delightful lake country we passed several happy days, which included a run to Milan, and on my part to Turin. On October 7th we returned to Lugano. It had been pre-arranged that the McClintocks, Richards, Ernest Hawkins, and ourselves, who were all in Italy, should contrive to find ourselves at Lugano on that day. The plan was faithfully carried out, and, much to the surprise of strangers, the four parties one after another entered the saloon of

the hotel and went through the process of effusive greeting and embracing with an ever-widening circle of previous arrivals. It must have been an amusing scene to witness. McClintock stood champagne for the whole party at dinner, and there was much merriment. On Monday we dispersed on our several paths; ours was to Baveno, thence by boat to Magadino, where we took a carriage to Fluellin, and we reached Lucerne on October 14th.

I have omitted many little descriptions I should like to dwell upon. The massive old castle of Schaffhausen, which stands to the feudal era in the same relation as Utrecht Cathedral does to the Reformation—that is, it was not quite finished when the age and its ideas passed away. The gates of the same place with their touching legends, “*Pax intrantibus*” on one side, “*Salus exeuntibus*” on the other.

An object of great interest is to be seen in the baptistery of Chiavenna. It is a noble font, dated A.D. 1246, about 19 feet in circumference, and 2 feet 9 inches high, hollowed like a bowl. The exterior is divided into twelve compartments, each presenting some scene or figure. The figures are nearly 28 inches high. The subjects are probably scriptural.

1. A castle with a figure at the top; a man forging money below.
2. A knight on horseback with a hawk.
3. A man carrying an infant.
4. A man carrying something—a candle?
- 5, 6. Two monks with a book.
7. Priest with a cross.
8. A figure with a candle.
9. A figure with a censer.
10. Figure, bearded, receiving a bag of money.
11. Figure, bearded, with a bag of money.
12. A smith forging money.

I noticed in the Museum of Artillery at Turin a curious sword with an Arabic inscription, the blade of which splits in two about 12 inches from the point; also a bronze sword (Greek) 45 inches long. There were many very fine reproductions of Benvenuto Cellini’s work, and much fine armour.

At Lugano was an inscription in honour of Abraham Lincoln, “*Il nome di che redense 4 milioni di Schiavé*,” a tribute which I fear we should look for in vain in England.

To return to Lucerne. We were unfortunate in the weather, and did not, if I remember, see Mount Pilatus at all; the whole scene was blotted out by mist. I passed part of my time again in the armoury.

On Monday, 18th, we left for Basle ; next day went on to Paris, and reached home on Saturday, October 21st.

I published this year a pamphlet of forty pages on the condition of the Royal Artillery Marriage Society, which was the beginning of successful efforts for a complete reform of that valuable charity.

The experiments at Shoeburyness, advancing continually in importance and costliness as rifled ordnance were developed, got this year as far as the construction, by the Engineers, of a granite casemate of 56 feet frontage, with two iron shields, which we proceeded to knock to pieces on November 25th with 7-inch, 8-inch, 9-inch, and 10-inch guns. On December 7th followed a target representing H.M.S. *Hercules*. These experiments were all virtually public, foreigners and representatives of the Press being freely admitted. I don't know that it could have been otherwise, but it was a disadvantage.

I do not think I have mentioned anywhere that in all these years, down in fact to 1871, the affairs of the Patriotic Fund made very heavy demands on my time. I was a member of the Executive and Finance Committee (latterly a Commissioner), and my dear wife a member of the Ladies' Committee. The minutes show how frequent its meetings were, and what a vexatious quantity of contentious business was always turning up, due chiefly to the antagonism of — to the committee generally, and to me in particular. This came to a head which necessitated his retirement in 1867.

A gentleman named Chorley went up for the Athenæum and got fifteen black balls on a total of 143. He therefore failed. It turned out afterwards that he was black-balled by mistake for another individual !

February 17th was marked by a very striking proof of the vigour John Bull can exert when he chooses. Ireland was on the brink of open rebellion ; it was known that hundreds of Fenians had enlisted in the army to corrupt the troops, and the Government brought in a Bill to suspend the Habeas Corpus Act in Ireland for six months.

All rules were suspended. It passed the House of Commons at 4.40 P.M. It passed the House of Lords at 5.50 P.M. A special train was in readiness ; the Bill was sent down to Osborne, and received the Royal Assent at 12.35 A.M.

This was a year of much political anxiety, and did not want its prophets ; but a gentleman named W. A. Baker, formerly an officer in the India Company's service, I think an engineer, went beyond all his fellows in his crazy but most positive announcements of the

coming events. The Queen was to abdicate in April, 1868 ; the Czar to be killed in Palestine, June, 1872 ; the dead in Christ to rise before daylight on December 6th, 1874 ; Antichrist to be revealed March 10th, 1875 ; and our Lord on September 20th, 1878 ! I have all my life believed, and I still believe, that Scripture contains prophecies which, rightly understood, are capable of throwing the light of revelation on the closing scenes of this dispensation, but presumption like this has always been rebuked by the event. This poor man, as others before him have done, so pinned his faith on his correct reading of the texts, that he became an utter infidel on discovery of his error.

My dear wife and I went to Ireland for a fortnight on July 2nd, and visited the Bartoluccis at Greenmount ; then for two or three days to Sir John Gough at Knockevan, then to Mr. T. Lefroy's at Ardmore, and Newcourt, where the old Chief Justice was living, then in his ninety-first year, but in full possession of his faculties.

We did not take our regular holiday till October 1st, when we went to Scotland, to the Wilkies at Foulden, and took Emily with us. She was just eighteen, and she came out at a very splendid ball given at Stitchell (Mr. Baird's). I think it was a house-warming.

On October 10th we went to the Stirling ball, where I witnessed such misbehaviour on the part of some of the ——'s party that I had difficulty in restraining my indignation. Emily had a third ball at Cupar, so we flattered ourselves that we did very well by our daughter.

Our visits to the Nobles at Jesmond and at Carron Hall were, as usual, full of pleasure, but we also visited Sir John and Lady Low at Clatto, and the Campbells at Camsesken. We came home by way of Peterborough to see the cathedral. It was then undergoing restoration, and the extraordinary sight was to be seen of a large square pew suspended by ropes from the roof. The owner had a faculty, and nothing would induce him to give up this pew. Its temporary removal was necessary. He insisted on its being replaced on the same spot, so while the rest of the nave was re-seated with modern benches this ridiculous monument of his obstinacy stood up among them. I heard that the family soon got ashamed of it, and consented to its removal.

We returned to Blackheath on November 3rd.

There was nothing calling for particular notice in the gunnery operations of this year. Firing at various iron shields and targets took the chief place, and my note-book is full of careful sketches of

the effects produced, now of no value. By this time eleven ships of war had 7-inch rifled guns in their armament, viz :

<i>Amazon</i>	...	...	2	<i>Mersey</i>	...	...	4
<i>Bellerophon</i>	...	...	3	<i>Pallas</i>	...	...	4
<i>Lord Clyde</i>	...	...	20	<i>Ocean</i>	...	...	20
<i>Cruizer</i>	...	...	1	<i>Rinaldo</i>	...	...	1
<i>Endymion</i>	...	...	4	<i>Zealous</i>	...	...	20
<i>Favorite</i>	...	...	8				

They were all at home but two.

We had at this time in the reserve of siege batteries a number of bronze 32-pounder howitzers, smooth-bored, and I made the proposal to try if their efficiency would not be greatly extended by rifling them, which the Commander-in-Chief "thought a very valuable suggestion." One was rifled accordingly, and fired September 3rd, with very satisfactory results. Ultimately rifled howitzers of a different description were introduced, but this was the first move in that direction. It was very much my opinion that the experienced officers composing the committee should occasionally bring forward suggestions of their own relating to service material, instead of always waiting for outsiders to move them. It would have created great jealousy if they had done so often. I do not remember anybody but Captain Heath, R.N., who ever proposed anything.

I published in 1866 a pamphlet of thirty-four pages, entitled "An Investigation of the Present Prospects of the Junior Officers of the Royal Artillery in respect to Promotion." It was discussed at considerable length by Sir Charles Trevelyan in the *Times*, June 18th, 1867, in the *Pall Mall Gazette*, August 20th, the *Army and Navy Gazette*, January 5th, 1867, and many other papers, and I think I may venture to say that it influenced the Government. It was very well taken in the regiment also.

My son Harry went up on November 20th for the Army Examination, and passed second, with 6,127 marks. The man who headed the list got 7,550, and the third on the list 6,008. There were 109 commissions given. I need hardly say that this honourable place gave us all immense pleasure. As he could not be posted to a regiment at once, I sent him out to Toronto for the winter. He was commissioned on May 1st, 1867 (by purchase), having already been drilled with the militia at the old fort at Toronto.

CHAPTER XVI.

THIS was a very cold winter. We had the thermometer at Blackheath down to 7·5 F. at midday on January 4th. On the 16th occurred one of the most frightful skating accidents on record. The ice in the Regent's Park gave way when covered with skaters and walkers ; over 100 were drowned.

On June 13th my dear sister-in-law, Clementina Bartolucci, died.

Just before this event we paid a very pleasant visit to Addington (Right Hon. J. G. Hubbard's). Among the guests was a plain old man, Mr. Spiller, I think, a churchwarden at All Souls. This worthy man had never been out of London for fifty years, His delight was touching to witness ; he must needs try to play cricket, and do all sorts of boyish things. The extreme kindness of the family to him, making him at home, left a most pleasing impression.

The Sultan visited the Arsenal on July 16th, and I, of course, attended him. The Prince of Wales and the Duke of Cambridge nominally conducted him, but forgetting how utterly unaccustomed the poor man was to go about on foot, especially over such rough pavement as some of it was, they sometimes shot on far ahead of him, and mine was the only cocked hat that stuck to him closely. The Sultan was very dull and heavy, and showed no interest in anything except the shearing of thick bars of iron like wax by great machines in the gun factories. He did not get out of his carriage, which was drawn up within sight of the furnaces, but insisted upon great pieces of iron being brought to him, that he might satisfy himself there was no deception. At the shell foundry he insisted on pressing so close to the furnace when the metal was pouring out that one of his suite begged me to make him stand back, which I did by laying my hand lightly on his shoulder, and drawing him back. My head was not cut off, neither on the other hand did I receive the gold snuff-box the service deserved.

We took our holiday at Boulogne, where we arrived on August 17th. I, however, went on to Paris on the 21st to see the Exhibition. Younghusband was there officially in charge of a valuable collection of arms and material of war, exhibited by our Government ; and as

I knew also "H. Coles, C.B.," and Augustus Franks, representing South Kensington, I saw everything to great advantage.

I accompanied Coles to the Marquis of Hertford's magnificent hotel, filled with the costliest luxuries and works of art not generally shown to visitors. Receiving various attentions, I felt it incumbent on me to give a dinner at the Maison Rouge to about half a dozen friends, and very pleasant it was. The bill came to 140 francs, wine included. A day or two afterwards two of my French guests invited me to a *déjeuner* at the same place. I could not but admit their superior knowledge in the art of good living, and above all in the choice of wine. They made the waiter produce some white Burgundy, which was nectar.

In a letter to his wife he says :

"My little dinner has been very agreeable and quite a success ; three Englishmen—Franks, H. Coles and YOUNGHUSBAND ; three Frenchmen—PENQUILLIER l'Haridan, Turpin, General Susanne. I must say, however, that the Frenchmen, especially l'Haridan had most of the talk. He and Turpin got into a discussion on the Revolution of 1848, with Susanne for a moderator. It was excessively amusing : l'Haridan shines very much as a *raconteur*. It was, I think, impossible not to feel that the Frenchmen had a liveliness of conversation, and an aptitude for speculative discussion, which you would seldom find among Englishmen. . . . Franks speaks French fluently, and got into an interesting conversation with l'Haridan. Some of the things said were worth attention. 'If there were a revolution to-morrow and Haussmann fell into the hands of a party of workmen, he would be torn to pieces !' So much for the improvements of Paris ! The Emperor's health is now re-established ; he does not suffer as he did. All his speeches since his return from Germany have been very pacific. The Zouaves are mostly Parisians, not (as lately asserted in the *Spectator*) Alsacians. They have, that is the real Algerians, a regular Mahometan service and chaplaincy. They are wonderfully well-conducted : crime nearly unknown ; not the least objection on the part of the Parisians to be controlled by them.

" 'Chaugarnier, l'homme le plus incapable que j'ai vu.' Lamoricière, same estimate. Bazaine (Mexico), 'The worst we can hear of him not half so bad as the truth.' The buildings called theatres in Paris are mostly forts, *i.e.*, constructed with express reference to their occupation by troops, and of great strength ; but the political danger is no longer from having an enemy within the walls : it is from

having a hostile army without ! They have driven the workmen outside the walls, and so scattered them that the difficulty of the police is much increased. However, until the army joins the mob, they have no chance. I was surprised, however, at the emphatic manner in which Susanne insisted on the innate hostility of the Parisian to the law and the police. He pleased me by insisting once or twice in a quiet way, against l'Haridan, that we are not living by the light of nature, but are 'Catholics.' Certain theories of H. about vice and virtue, very ingenious and not the least licentious, but merely speculative, met with a quiet negative, which shows him to be a man of serious thought. . . . To-day (Wednesday) I *disjeune* with l'Haridan, and shall probably go afterwards to see the Prince Napoleon's collection at the Palais Royale, and to-morrow to see Lord Hertford's. I spent a little time yesterday in the Bibliothèque Impériale, which is a free library. You get any book by asking for it. There are professional libraries of the same sort for poor students—for example, medical. Susanne gets monthly returns of the number of officers who avail themselves of the military libraries. He says it is invariably *nil*, unless at some out-of-the-way place, where they have nothing to do and no amusement. He does not speak highly of Trochu's book ; says it was very indiscreet and inopportune, partly founded on pique.

"I go, of course, every day to the Exhibition, and have not half seen it yet. The cabinet purchased for £3,000 is a lovely thing, worth the money—of ebony inlaid with lighter woods ; the inlaying goes quite through the panels. There is a very little lapis lazuli and bloodstone introduced. The caryatides are lovely—representing, I fancy, the four quarters of the globe. The China court I have not found—in fact, there are literally miles of counter, and it would take a month to see all.

"One can hardly help asking whether the stride to the angelic stage can be much greater than from the primitive flint-workers to man as he is here presented. At any rate, one feels that it is not man's intellect that keeps him down. Endow him with angelic holiness, and he would be little lower than the angels. It is impossible not to remark that the corruption of morals keeps pace with the advance of art. . . ."

I rejoined my family at Boulogne at the end of August, and we were fortunate enough to witness an extremely beautiful religious ceremony while there. It is the annual procession of all the schools and religious orders, the municipality, and private persons,

with banners and music, to the cathedral. The children were in fancy dresses ; it was admirably marshalled, and composed with a view to effect ; in length almost interminable.

We reached home on the 2nd September, and having three weeks of holiday left, I started next day for the meeting of the British Association at Dundee, where I was the guest of a large jute manufacturer, whose name I am ashamed to have forgotten, for he treated us most hospitably ; my only complaint was of the excess of it, especially in the article of whisky toddy. Every meal was a banquet.

My fellow guest was Professor Clerke Maxwell.

From Dundee a very pleasant excursion was made to Fingask, which is described in a letter to his wife.

“ I wanted you above everything yesterday. Fingask, which, however, is not your Fingask, is a beautiful place on the hills above the Carse of Gowrie, the whole of which has a great resemblance to the Carse of Stirling and the Ochils, but the interest is in its contents. The family are hereditary and enthusiastic Jacobites. The grandfather of the present baronet was out in the '45, and the house is a museum of Stuart relics of every description—portraits, miniatures, autographs, arms, dresses, books, glass and china, musical instruments, Queen Mary's jewelled distaff, instruments of torture, etc. In fact, it is impossible to say what there is not, and the owners, at least the two old ladies who did the honours, are as unique and delightful as anything else in it. They gave the party the kindest reception, showed and explained everything, and when we were going away they insisted on our forming a large ring on the grass, when we crossed hands and went through some highland ceremonies, part of which consisted in singing ‘Auld Lang Syne’ in chorus. Stupid as I am, and empty of all gaiety of spirit, it was impossible not to be amused. Arthur Kinnaid called on me to return thanks for our reception. I was anxious to escape, and devolve the honour on Gassiot, Sylvester or Wheatstone ; but the unlucky ‘General’ prevailed, and I had to do it.

“From thence we went to Rossie Priory, Lord Kinnaid's place, remarkable for its beautiful situation, and for containing a large part of the Orleans collection of pictures and *vertu*. There are pictures of many of the great masters, and very fine ones. I have never seen in a private house so many : Titian, Velasquez, Guido, Guercino, Sebastiano del Piombo, Poussin, Rembrandt, Vandyke, of the last, a charming portrait of Prince Rupert as a boy in a white satin doublet.

There is some fine statuary, immense quantities of the finest china, and a long corridor, where we dined, entirely filled with Roman sculptures, inscriptions and mosaics, built into the walls; as I understood, the contents of some ancient villa, accidentally discovered at Rome some years ago, and purchased by the late lord. One of the finest things is a full-length statue of Lady Kinnaid by Brodie, the sculptor of the 'Blind Girl.' They gave us an excellent dinner, and there was really good speaking. I went with the Gassiots—nice people.

"Cyril Graham asked me to speak on Palestine in his support—Section E. I said a few words, and an old gentleman pressed me to give a lecture on the subject at Leamington, promising a large audience! A tribute to my eloquence I cannot but record, as the newspapers probably won't say anything. It was all done to gain time for Tristram to come from another section, but in vain, for he did not appear."

I went on from Dundee to Orkney, accompanied by the late James Fergusson and John Arrowsmith, the geographer. It was a thirteen hours' voyage. I was the guest of my old friend, Dr. John Rae, who was at the time residing near Kirkwall. Sir John Lubbock arrived a day or two later, and in company with a local antiquary, Mr. George Petrie, we made some delightful excursions to Maes Howe, to the standing stones of Stennis, and other places.

Extracts from letters written at the time.

"*September 12th.*—Yesterday we went over to Shapensey, the next island, the residence of the great proprietor, Mr. Balfour, who has built himself a castle fit for a duke. Shapensey is about 7,000 acres, of which nearly the whole is fit for oats or grazing, and Mr. Balfour has within the last twenty years more than doubled its production; population 1,000. Our object was to walk to a Pict's house at the farther end, about five miles, and it came on to rain and blow, *like* Orkney. However, we got there and then back, wet through, but are none of us the worse. The Balfours were exceedingly kind; gave us what dry things they could raise, and then a very excellent dinner. The chairs had white covers, and considerable amusement was afforded by the condition of mine when I rose.

"Mrs. Balfour recommended as an infallible preventive of cold a few drops of camphor solution on sugar. I preferred another solution, also applied internally, and it had an excellent effect. Early strawberries and peas are about coming on here; we had both, and they were excellent, and hothouse grapes. In fact, I have looked

down from the cathedral tower upon gardens with wall fruit-trees, apparently pears. We had a ball last night, but I took a private opportunity of slipping away to bed soon after eleven."

"*September 14th.*—We had a most interesting day yesterday, but, as usual, got very wet. We drove first to Maes Howe, about ten miles; then walked to the circles of Stennis and Brogar. The latter seems to be what is most commonly known as the Standing Stones of Stennis, but there is a smaller and less perfect circle to which the name more properly applies. Anything wilder, more impressive and weird than these grey giants standing in solitude cannot be conceived. There were originally sixty, enclosing a circle of about $2\frac{1}{2}$ acres; there are only sixteen now standing, but several are fallen, and it is proposed to set these up, which will much improve the effect. Six of them are standing together, about thirteen feet high, and three to five feet wide. Several of the fallen ones are broken, but there are several entire. Here we got our ducking, but we found a farmhouse a mile or two off, and enjoyed oat-cake, cheese, and whisky, which Mrs. Rae had provided, all the more for it. Then we drove on seven miles to Skäll—such a Pict's House!"

Maes Howe had not then been very long opened, and the numerous Runic inscriptions it contains had been still more recently deciphered; there was, therefore, a peculiar interest in that visit. We returned by sea to Leith, whence I rejoined my dear wife at Foulden, and we returned home on September 21st.

Fenian rebellion was now at its height. The three "Manchester martyrs" were executed on November 22nd, and on December 13th the abortive attempt was made to blow up Clerkenwell Prison—abortive in one sense, but in another successful. It opened the eyes of English statesmen to the intensity of the Celtic passion against the Saxon yoke, and gave the impulse to the policy of concession since pursued. Gladstone characteristically gave way at once.

The gunnery experiments of the year were chiefly directed against targets representing ships. The Americans, being unable to build up large wrought-iron guns, persuaded themselves that very large smooth-bored cast-iron would produce as good or better results. Our Government, to give the thing a fair trial, purchased a 15-inch Rodman gun of $19\frac{1}{4}$ tons, firing round shot of 450 lbs. to 500 lbs., with charges of 60 lbs. Their inferiority to rifled guns was very soon demonstrated, and the money was thrown away.

I was pleased with one incident that occurred. We were firing at a target of 8-inch plates, Sir John Pakington being present, and a question arose whether another round, not in the programme, should

be fired from the Rodman gun, I was opposed to firing it, because the target was then much injured. His orders were requested, and he heard the reasons *pro* and *con*. I could see by his face the conflict of his mind, but he decided in the affirmative, and fired it was. It was a failure, and strengthened the case in favour of rifled guns; but I was afraid that in the weakened condition of the target it might have had a destructive effect, and then we should have had an American jubilation and volleys of abuse from the newspapers. I thought his decision a wrong one, but I rejoiced at a decided answer and to see him take a serious responsibility which he might have shirked. The gun was fired on many occasions down to June, 1868.

On January 2nd, 1868, General Lefroy submitted to Sir John Pakington a "Proposal to add to the inducements held out to officers of the Royal Artillery to cultivate the more advanced scientific branches of their profession."

In this paper he points out several ways in which a stimulus might be given, and the "Advanced Class" established in 1865 made more attractive.

"1. Pecuniary endowments, such as Fellowships or Scholarships.

"2. Honorary distinctions, such as gold medals.

"To give every second year one military Fellowship of £50 a year, . . . or if this expense is considered too great, there is the less expensive alternative of offering for competition every second year, that is to each class of officers, one gold medal, one silver medal, . . . neither to be given unless there are papers produced up to the standard thought reasonable . . ."

The suggestion was not adopted; but after Sir Henry Lefroy's death in 1890 his family founded a gold medal to his memory, to be won every second year by the officer of the Royal Artillery who should pass highest in the examinations at the Military College, provided that he took honours in two subjects, this college having superseded the Advanced Class of 1865.

We took a week's tour this spring to the north of France. I was anxious before bringing out the family history, which had occupied my leisure for a long time, to visit Cambrai and ascertain whether any information relating to the family of Loffroy was still to be gathered from old registers there. We reached Cambrai by way of Mons and Valenciennes on March 31st, and returned home on April 4th. I was fortunate enough to find a learned, obliging, and sympathetic person in the public librarian, M. Charles Auguste Lefebvre, who found entries going back to 1566-8 containing the name, but nothing to prove descent. Almost all such records were

destroyed at the French Revolution. He referred me also to various genealogical books, and on the whole I was not disappointed.

In March the Queen was advised to issue a new commission of the Patriotic Fund, and, from having been an honorary secretary since 1854, I was made, and am still, one of the commissioners. Captain Fishbourne was pensioned off.

April 14th.—Abyssinian War. Fall of Magdala.

We took our holiday on August 17th and drove down to Walmer, where Ernest Hawkins was in lodgings, in an illness from which he never recovered, though he was able to be taken back to London about five weeks later.

On our way we stopped at Petham, I should rather say Kenfield, in that parish, the seat of the family of Thomson, and at this time of my very remote cousin, Mrs. Thomson, and her husband, who had taken her name. Nothing could be kinder than their reception, or more cordial than their acknowledgment of the slender tie of relationship between us. Her father, strange to say, had fought at the Battle of Minden (20th Regiment) in 1759. He married very late in life, and thus a not very old lady in 1868 was the child of a parent born in the reign of George II.

My holiday came to an end on October 15th, and was spent chiefly in Ireland and Scotland, but included visits partly official to Sheffield and Leeds. At the former I stayed with Mr. Firth, a great steel manufacturer, and was invited with him to meet Mr. Reverdy Johnson (the American Minister, I think) at Mr. Abbot's, the American Consul.

The company included Roebuck, M.P., Lord Milton, Dr. Sale, Cammel, Webster, Reed (afterwards Sir J. Reed, M.P.)—he was then in the Admiralty as Chief Constructor, and one or two more. We had a sumptuous dinner, and when the cloth was removed our host, giving us a hint that we were strictly a private party, led off in a political conversation, chiefly sustained by Roebuck and Reverdy Johnson. I have rarely listened to one so interesting. The conflict of the American Civil War was hardly over, and the future relations of north and south but imperfectly settled. I cannot at this distance of time recall the arguments or the stories, but it was an intellectual treat of a very high order.

An amusing incident occurred on our way to this party. Reed and I started together and picked up Reverdy Johnson by the way. In getting into the carriage Reed somehow tore his trousers, and we pulled up at a tailor's to get them mended. He was some little time about this, and when he re-appeared, says Johnson, "You have been

an almighty time getting those pants of yours repaired, Mr. Reed ! Why, if this had occurred in Washington, I should just have driven you off to the White House, and our President would have fixed you up in no time !” The then President of the United States was Andrew Johnson, by profession a tailor.

My dear brother-in-law, Ernest Hawkins, died on October 5th ; unconscious almost to his last hour that he was dying. This is a common characteristic of his complaint. When fully aware of it, he took an affectionate farewell of his family and met death as a Christian should. Although only a Canon of Westminster, he might, if he had had the least ambition, have risen much higher in the Church ; but he loved the cultivated society of London, his cheerful, genial spirit was at home at the Athenæum, and his extreme humility shrank from any obtrusion of his services to the Church as secretary for many years to the S.P.G., the man to whom the great extension of the Colonial Episcopate after 1839 was pre-eminently due, and the trusted counsellor of half the bench of bishops.

About ten days after my return to work, viz., on October 23rd, I was summoned to the War Office, and learnt from Sir John Pakington his intentions with regard to a considerable re-arrangement of the duties of the ordnance branch of the department. It comprised the abolition of the Ordnance Select Committee, of which I was then president, but promoting me to be Director-General of Ordnance and Commandant of the Royal Arsenal, with the rank of Major-General.

I was called upon, in conjunction with Sir Edward Lugard and Sir Henry Storks, to submit a scheme in detail, and did so at some length in a paper dated October 27th. I did not get my official appointment until December 4th, and on Monday, December 7th, it became my duty to announce to the O.S. Committee that it was dissolved.

“In communicating this decision to the vice-president and members,” said Sir Edward Lugard, “you will convey to those officers the Secretary of State’s acknowledgment of the value of their past services, and his assurance that he has not resorted to this step on the ground of any dissatisfaction with the committee as at present constituted, but with a view to other arrangements, by which it is hoped that the business heretofore referred to them will be conducted with greater economy and despatch.”

The document was received in silence, and the committee immediately dispersed, but they received pay to the 31st. I imagine that the intention was known to them, as the Admiralty would most

probably have informed the then vice-president, Captain Luard, C.B., R.N.

The surviving members of the committee had the tardy satisfaction twenty years later of hearing a large part of the disasters and petty failures which occurred in the introduction of large breech-loading ordnance, attributed by the then First Lord of the Admiralty, Lord George Hamilton, to this ill-advised economy. The committee was suppressed from 1868 to 1881. "He believed he was justified in drawing the moral that every pound that was saved by the abolition of the scientific committees during those years had lost this country many thousands of pounds since."¹

Unfortunately for me, Sir John Pakington did not remain in office long enough to give a fair start to his own scheme. Only three days after this D'Israeli's Government went out of office (December 10th), and though I was duly gazetted and got my commission as Director-General of Ordnance, Mr. Cardwell, who succeeded, never seemed to adopt Sir J. Pakington's views, if he took the trouble to understand them. The commandantship of the Arsenal was quietly dropped, and I found myself at once confronted by the hostility of Major-General Balfour and the silent but active opposition of the store branch of the War Office.

I may here observe that not a word was said in the many conferences I had with Sir John Pakington, Lugard and Storks, before my appointment, as to future relations with the new-fangled Comptrol Department; nor did the circular memo. by which I was appointed, or the more detailed instructions given me (of which I cannot find a copy) contain any clauses intimating that the Comptroller-in-Chief or his assistant had any more authority over me than the Director of Stores, for instance. All I knew, or at least might have known, for in fact I did not, was that it had been announced to "the gentlemen in the War Office" by Sir John Pakington, by a memo. dated January 1st, 1868, that "Major-General the Right Honourable Sir Henry Storks, G.C.B., has accepted the office of Comptroller-in-Chief, and Major-General Balfour, C.B., has consented, as a temporary arrangement, to act as his assistant."

The wording is curious, as if these gentlemen were conferring a favour on the public service; it certainly does not seem to confer that comprehensive power of universal interference, upon pretext of financial responsibility, which General Balfour proceeded to develop, and by which he disorganized the War Office to a surprising degree.

¹ Speech of Lord G. Hamilton to the Liverpool Conservative Club, November 28th, 1889 (*Times*, November).

I never could myself discover on what his reputation for financial ability was based.

My communications to Mr. Cardwell did not, naturally, pass through the Comptrol Department, but through Sir Edward Lugard. When, however, they involved any proposal for the expenditure of stores or ammunition, they were passed to that branch, and this was so frequently the case as to give Balfour endless opportunities of obtruding his opinions and criticising my recommendations, often in an offensive way. To so absurd and vexatious an extent was this financial check carried, that if I had obtained sanction for a certain experimental expenditure of twenty rounds of ammunition, and it became necessary to fire a few more, the experiment must be stopped and a further authority procured. Of course it was impossible that such a state of antagonism between two high officers could go on for ever. It ended in the abolition of my office in March, 1870, and of his in March, 1871, of which I shall have more to say further on.

Meanwhile my personal relations with the chief of the War Office continued to be as agreeable and friendly as possible.

Nobody could be kinder personally than Mr. Cardwell, who frequently sent for me, and called for reports on different subjects, in a way that showed his full confidence. I was upon visiting terms, and asked to Eashing, his residence near Guildford. Even with Lord Hartington my intercourse was always agreeable, though formal; but for reasons unknown to me, they all seemed tacitly resolved not to check Balfour, but to let him manage his business of cutting down expenditure in his own way. Whether he really effected any economies of consequence I do not know. The comptrol system was a failure, and it did not last ten years.

Our residence at Blackheath at this period was made agreeable in many ways by the residence of Prince Arthur under the tutelage of Lieut.-Colonel, now Sir Howard, Elphinstone, R.E., at the Ranger's House, and of Admiral William Baillie Hamilton, a cousin of my wife's, at another of the houses of the Crown. The Prince did not receive ladies at dinner, but he came once or twice to a dance at our house. He gave a beautiful dance on February 9th. Emmie was there. It was the first time I ever saw a cotillon; proof of my ignorance of the ways of the great world.

On February 23rd my nominal appointment as head of the Arsenal came to an end. Gordon, afterwards Sir William Gordon, the former principal storekeeper, now comptroller, was made supreme; as his great force of character and the advantage of his position and

unlimited opportunities of obstructing everybody else, had made him *de facto* for a long time.

Chief Justice Lefroy died at a great age (in his 94th year) on May 4th. He was personally almost unknown to his English relations for the last thirty years of his life. I was more frequently in Ireland and saw more of him than anyone else, except my sister, Anne Rathdonnell, and received much kindness from him. The piety of his old age cannot be questioned, and is attested by many religious biographies besides his own.

After a short visit to the Armstrongs at Cragside and to Carron Hall, Annie and I embarked at Leith on August 21st for Hamburg, on our way to the Congress of Prehistoric Archæology held at Copenhagen, leaving the children to the care of kind friends in Scotland, Carron Hall, Camseskan, Gilmerton and Kingsdale. We landed on the 24th, passing very close to Heligoland. From Hamburg we went on by Lübeck to Copenhagen, and reached it on the 26th. The Congress opened next day.

I do not know how to do justice to the excessive hospitality of the Danes, or their efforts to entertain their guests.

I gave an account of this Congress to the Archæological Institute, November 3rd, 1869. (See *Archæological Journal*, Vol. XXVII. p. 58.) The Congress was opened by the King, Christian IX.; the intervals between speeches being filled by the most delightful choral singing by an unseen choir.

A royal steamer was placed at the disposal of the Congress for an expedition to Roskilda and the Island Sælager, where there was a large "kitchen midden" to be explored. We had on board the best Choral Society in Copenhagen, and their singing was exquisite. Champagne and every other luxury was profusely supplied, so that feasting seemed never to cease, and the day was lovely. I can recall no day's pleasure in my life to be compared with this one, apart from the interest of the company, which embraced a very large proportion of men of European reputation as scholars and antiquarians. England not being well represented, my dear Annie and I received the more attention; and her bright spirit and ability to converse in French and German drew many around us. I could speak no German and not good French; we found, however, many who spoke English.

On September 3rd, I had the honour of an invitation to a dinner at the Palace, where I was placed next to one of the princesses, I think the Princess Thyra, a very charming young lady of delightfully simple manners. All members of the Congress were not invited to

this dinner, but all received cards to a *fête* given in the evening at the Tivoli Gardens, a place of public amusement frequented by all classes; answering, I imagine, very much to what Ranelagh and Vauxhall Gardens were in their best days. The evening, however, turned too cold for much enjoyment.

Copenhagen is worth a visit at any time for the museums and galleries of art. We had the pleasure of visiting some of them in company with Professor Worsae and Professor George Stephens. General Raastoff, the commandant, detailed two officers of artillery to accompany me to the defences of the harbour, including the famous Trekroner Fort, and gave us a steam launch. It was a very rough day, and I believe we should all of us have been glad to get off, but we sustained the honour of our respective nationalities, and made the round without breaking down, though the Danes looked curiously at me and I looked at them.

I of course paid my respects to the British minister, Sir C. Wake, and we dined at the Embassy. A very delightful excursion was made by a large party to the country house of a wealthy merchant, who gave us a sumptuous lunch. I am ashamed to have forgotten his name.

We left for Lübeck on the 4th September and arrived there at 5 A.M. on Sunday, 5th, greatly pleased with the comfort, cleanliness and good fare of the small steamer we travelled in. The next day we reached Berlin by rail at 4 P.M.

I went to leave a card on Colonel Siemens, a Prussian officer I had known in London. He was a brother of the late Sir William Siemens. I was much amused next morning by his being announced while I was at breakfast; and presently, with a great jingling of spurs and clattering of scabbards, he and another officer walked up to the table, drew their heels together, stood at "attention," and delivered a formal salute. He was extremely friendly, and having ascertained my wish to see anything in my line as an Artilleryman, he next day took me to the arsenal at Spandau, and the day following to the practice ground at Tegel. I had a little proof here of the different manner things are managed abroad from our very free and easy system at Shoeburyness. They were firing a Krupp breech-loading field gun. I was not allowed nearer than about 200 yards. Something went wrong; there was an excitement round the gun; I could get no answer to my questions, and it was only afterwards that I learned that the breech had blown out and a man been injured.

After this Colonel Siemens took me to his eldest brother's electrical factory, where I saw many extremely ingenious machines for the

electrical discharge of guns automatically, when the ship or other object was in the line of fire. Some applications of this I had seen at the Tre Kroner Fort, and they gave me the drawings.

The history of the Siemens family is very interesting. The father was in a humble position and died young, leaving a widow and three sons. The widow was a woman of the highest character and devoted herself to the education of her sons; but the eldest of them was under the necessity of entering the army, where his high character and conspicuous ability enabled him to rise. Exercising the strictest self-denial, he managed to economise upon his small pay, and devoted all he could save to the education and advancement of his brothers, with so much success that one became the late Sir William; the other was, when I knew him, a Colonel, and probably rose higher. I lost sight of him afterwards. It is a very beautiful example of filial piety and family affection, and of the blessing attending both.

I had time after leaving the factory to visit the museum, chiefly to see the "Heldersheim Silber find," a large collection of silver plate buried by Varena before the last fatal battle in which the Roman Legions were cut to pieces. The spot was a few miles from Berlin, and this treasure was brought to light about 1860 in levelling some inequalities of ground to make a rifle range. The soldiers secreted a great deal, but over 100 lbs. weight was recovered, and is now displayed. I have photographs of it.

We left Berlin for Rotterdam by way of Magdeburg on the 10th September, and landed at Hull on the 13th, after the worst passage I ever made; we were battened down all the way, could get no one to attend to us and nothing to eat—we were half starved.

We went on immediately to Edinburgh and next day to Kingsdale; on the 17th to Foulden and dined at Aytoun Castle (Mitchel Innes).

On the 21st an expedition was organised to Edin's Hall, near Dunse, an exceedingly curious Scandinavian or Pictish castle, which had been excavated, or rather cleared of accumulations of *débris*. I gave an account of it in the Archæological Institute (*Journal*, Vol. XXVII.), and also of a *Weem* in the neighbourhood. They were both objects of the greatest antiquarian interest, but especially the latter, which may be of any antiquity, long anterior to any race inhabiting the British Islands of which we have tradition.

We returned home by way of Doddington and paid a short visit to the Rev. Henry de Bunsen, then rector, whose wife was a Harford.

Colonel Boxer's resignation of the office of Superintendent of the Royal Laboratory, which he had held fifteen years, occurred on 22nd

November. He had long been in conflict with the War Office about certain questions of patent rights. In him subsided from public view a very able but very insubordinate officer, whose energy, however, during the Crimean war ought always to secure him an honourable place in the annals of the regiment.

On the 26th November I accompanied the Secretary of State, Mr. Cardwell, Lord Hartington, Mr. Childers, First Lord of the Admiralty, and Admiral Hood, R.N., on an official visit to Mr. Whitworth's works at Manchester.

Sir Joseph Whitworth (he was knighted this year) was under a firm belief that I was the great obstacle to the adoption of his system of artillery by the War Department, and attributed to me an authority I never possessed. He regarded me as a personal enemy. The truth is that I was very early persuaded that his mode of rifling guns was not adapted for the service, and so far I was an opponent ; but I had nothing to do with the various committees that he had influence to get appointed, such as the Armstrong and Whitworth, 1863, or the small arms trials, or Colonel Elwyn's Committee, 1870, or the innumerable trials by the Admiralty.

The best evidence that his opponents were justified is to be found in the fact that no great Power, that I am aware of, has adopted his system, though all have tried it. He was making in November, 1869, two 11-inch 27-ton guns for Russia, but Russia has not adopted it.

Brazil bought a number, and subsequently bored some of them out and altered the rifling ; but they have a great many still.

Our own Government bought and tried nineteen guns in steel and homogeneous iron, besides rifling fourteen bronze blocks and four in cast iron, between 1856 and 1866. Sir Joseph had immense political influence and brought strong Parliamentary pressure to bear upon every Ministry, especially the Liberal ones. He engaged clever writers like Sir Emerson Tennant to cry him up, and he had the *Times* on his side ; yet he failed. There must be some other explanation than the ignorance, or incapacity, or prejudice of the naval and military services, and it is that real objections preponderated.

I fancy, latterly, as he gave up the control over his own works, the directors have altered their policy. I doubt, however, whether the truth will ever be told. The *Times* and other papers have quite a craze against the Ordnance Department. The fact is that contractors and inventors, and interested parties, whose object is to spend other people's money, are so strongly represented in Parliament and in the

Press, that the authorities in the War Office are carried away in the torrent and are deluged with abuse.

I am inclined to transcribe here, as containing some opinions in a condensed form, a minute I addressed to the Comptroller-in-Chief in answer to an inquiry of his, which I have not preserved.

“COMPTROLLER-IN-CHIEF,

“It would be easier to write a pamphlet than a minute in answer to your question. The history of the introduction of rifled artillery is in all countries a history of the struggle of new ideas against prejudice, official timidity and financial caution ; accompanied, as is often the case, by official rashness and financial incaution on particular occasions of urgency. The vigour which has placed this country far ahead of all competitors in the quality, and I believe also in the number of its rifled guns, is a thing which will, I hope, never be wanting, and like the selection of one able man (Armstrong) to work out a new system, is an example to be followed. Some of the arrangements which should be avoided are these :—

“(1). Maintaining a permanent body like the Ordnance Select Committee of 1858, and setting it aside when an important question arises, as was done by the appointment of the first Rifle Cannon Committee of November, 1858, and the second of September, 1859.

“The better plan would have been to have infused new life into it if necessary.

“(2). Accepting as a full discharge of a great public trust such a very defective report as that made by the latter of those two bodies ; upon which the 6-pounder, 12-pounder, 20-pounder, 40-pounder and 7-inch (Armstrong breech-loading) guns were introduced.

“(3). Giving such very large orders all at once, as was given in February, 1850, for 200 7-inch guns, before one had been tried, or even a drawing sealed.

“(4). Not drawing a proper distinction between the functions of the inventor, even if a great mechanical genius like Sir William Armstrong, and those of a Director-General of Ordnance, or whatever professional authority should be responsible for what is really introduced.

“(5). Not having a sufficiently definite responsibility fixed anywhere and accompanied by sufficient authority.

“(6). Making many experiments on too small a scale. Taking some things for granted that ought to have been determined by experiment. Penny wisdom ; pound folly.

“(7). Impatience of laborious detail necessary for working out the

consequences of what is proposed, before standing committed to them.

“(8). Attempting too many things at a time ; wasting money, strength and time over things that were of minor importance.

“It would be easy to multiply these lessons, but they are probably enough.

“(Signed) J. H. LEFROY.

“June 20th, 1869.”

No. 4 of the above requires some explanation, and I am not sure that the position I took could be sustained. What I meant to imply was that Armstrong's inventive faculty and activity of mind had been exerted rather too independently of any controlling authority, and had led to a great deal of abortive expenditure, besides waste of time. The last clause gives an erroneous impression, because he had not the power of introducing anything until approved.

In an honest desire to introduce reforms, without any personal or technical knowledge to direct him, Mr. Cardwell appointed many committees, and frequently put questions to me that called for elaborate answers. I enumerate some of my papers, headed at the time “Confidential,” on which I willingly stake my official character and reputation as the first and last Director-General of Ordnance. That I should have done better to have remembered Talleyrand's precept is indeed undeniable, “*Point de zèle.*”

I. *Memorandum on the future organization of the department of the Director-General of Ordnance, with reference especially to the duties hitherto discharged by the Ordnance Select Committee.*—January 11th, 1869.

I quote the concluding paragraphs of this document.

“XXI. In contemplating therefore a stable organization of this branch of the War Office, I assume these changes:—

“(1). That the Director-General of Ordnance has free communication with the Principal Superintendent of Stores at Woolwich, as one of the officers of the Royal Arsenal.

“(2). That a reasonable liberty of action is restored to him, even where some expense may be involved, when it is clear that the public interests require it. The late Director of Ordnance could authorize expenditure up to £200, but the defect of the system was that he could authorize a second and a third expenditure, provided it did not exceed that amount, on the same service, which rendered the restriction in a measure nugatory. I do not ask this, but only a reasonable confidence. I have had to obtain authority to fire only

two shots in a particular case where it was absolutely necessary and had been requested by the Horse Guards. If sanction were given for the expenditure of twenty rounds at Shoeburyness, and it became necessary to expend twenty-one, it is at present my duty to arrest the experiment and obtain authority for the odd round.

“(3). I assume that irregular private or extra-official references to officials, who are not in the chair of responsibility, are checked, and that some restraint is put upon the practice of raising questions whose present importance appears to bear no proportion to the want of valuable time in answering them. One of these questions has involved a history of fuses for the last twenty years and seems calculated to revive interminable bygone controversies. Another has required me to assign the precise responsibility of Lord Dalhousie, Lord Herbert, the Duke of Somerset, and others, for certain measures in the early history of rifled guns, and to prove it by the papers. The thing can be done, and as a chapter of history may be interesting when done, but it appears to me not worth the time and labour that must be taken from current business to do it.

“If, however, these things are regulated and the duties of the Director-General of Ordnance defined, I have no doubt of being able to work the plan now submitted.”

II. *Abstract of information respecting our present provision of rifled ordnance, and the probable number of pieces that must ultimately be provided for all purposes.*—February 2nd, 1869.

III. *Memorandum on the Department of Supply and Control.*—February 26th, 1869.

IV. “*Why is there such an officer at the War Office as the Director-General of Ordnance?*”

“*The answer to this question must involve all the elements of a determination of what his duties should be.*—March 18th, 1869.”

We learn from the second report of Lord Northbrook's Committee,¹ dated May 7th, that the appointment of a head of the arsenal “was strongly objected to by the heads of departments, who agreed that it was undesirable to diminish their individual responsibility.” They were sure to object.

Their third report, dated February 12th, 1870, contains the following recommendation (p. xix.) :—

“For the purpose of assisting the Secretary of State and the Chief of the Control Department in scientific questions, and in the conduct

¹ Lord Northbrook, Mr. Stanfield, Mr. W. G. Anderson (of the Treasury), to whom Sir E. Lugard was added after the first Report.

of experiments, we recommend that the Director-General of Ordnance should be retained as a purely consultative officer, and a standing member of the Ordnance Council, without a staff of clerks ; the correspondence on these subjects being carried on in the Control Department. Under this arrangement a deputy Director-General of Ordnance would no longer be required."

This was my *coup de grâce*. I handed in at once to Lord Northbrook my respectful protest, March 1st :—

"A Director-General of Ordnance, who is to direct nothing without a staff of clerks ; whose correspondence is to be carried on by an independent and, as all experience shows, a rival and unfriendly department ; who will have no authority to look after the proper execution of what he had advised ; whose advice no one is bound to follow, or even to ask, will be an anomaly in administrative arrangements from which I cannot augur any good effects."

I proceeded to give some reasons, and to claim the usual compensation given on abolition of office, contending that it amounted to nothing less.

I formally declined to hold the new post by an official letter, dated March 16th, and on the same day reported myself to the Deputy Adjutant-General, but asked to have my rank confirmed.

Both Lord Northbrook and Mr. Cardwell discussed the subject with me in a friendly spirit ; the former went so far as to admit that much had occurred "very unpleasant" to me. I, however, was resolved to put up with my position no longer, and adhered to my decision.

On March 21st Mr. Cardwell sent for me, and I wrote down our brief colloquy.

Mr. C. : "Well, General, since better may not be, I am afraid we must part.

"I have spoken to the Duke of Cambridge about your rank. You will understand that I can't engage. He said that he must look into it ; but was very favourable, and I spoke about his employing you. He said he would be glad if he could.

"I shall submit your name to the Queen for the Bath, if that will be agreeable to you.

"I assure you, 'to the foot of the letter,' how sorry I am to part with you.

"Is there anything else I can do for you ?

"I hope you will always look on me as a personal friend."

With these kind expressions we shook hands and parted. I dined at his house on April 2nd. Mr. Cardwell was created a peer on

leaving office in 1874, but his health soon after completely broke down. He died in 1885.

For my part, Lord Northbrook intimated to me in a private conversation that Mr. Cardwell had obtained a promise of the government of Bermuda for me, which, however, could not take effect until next year, as Sir Thomas Gore Browne would be first put in to complete his time of service for pension. The Treasury gave me a gratuity of two months' pay, and refunded a sum of £79, which had been formally deducted from my salary towards a superannuation allowance. Although I fought for better terms, chiefly because they had been more liberal to other people, I am not prepared to say that, as an officer on full pay, I had any great ground of complaint. The superannuation fund had been abolished some twelve years. It was a mistake, as the Treasury admitted, to have ever put me under the stoppage.

Colonel Adye was gazetted "*Director of Artillery and Stores*" on April 19th, thus putting an end to the rivalry which had been so fatal to me. I never suspected Mr. Cardwell of any double-dealing, but no doubt my retirement cleared the ground, and my many remonstrances were not fruitless. Adye was acceptable at the Horse Guards; his appointment was popular with the Artillery; he was a strong Liberal in politics; and, I humbly acknowledge, a better man for the post all round, as matters stood.

I was appointed, in October, "to serve on a committee of officers entrusted with the full consideration of the torpedo defence of certain important positions," under the Inspector-General of Fortifications (Sir F. Chapman), and with this duty my services under the War Department came to an end.

Released from labour which had become a second nature, and for the first time in my life master of my time, my dear wife and I contemplated going to Italy for a long time. I invested in portmanteaux, travelling bag, etc. The outbreak of the Franco-German War, which was declared on July 15th, caused us to give up the idea.

On June 2nd we went to Torquay, where I took a house. Joseph and Isabella Dundas were there, and my old Toronto friends, the Arnolds. I took a great interest in the explorations of Kent's Cavern and the caves at Brixham, which we visited with Mr. Pengelly. Mr. E. Vivian, of Woodfield, a banker by profession, but a scientific geologist, was another agreeable acquaintance we found.

Writing to a sister, lately widowed, June, 1870, he says:—

"A. has already given you our general impressions in regard to

establishing yourself near the Burrows'. I think their neighbourhood would prove a great comfort. He could find you a little regular parochial occupation, which will be essential to your cheerfulness anywhere, and his tone of mind is so high, they are both such devoted people, without a particle of ostentation, that they do indeed 'allure to brighter worlds and show the way.' Christ walks still among the dwellings of the poor, and is met there by those who minister to them. There is no fact I am more convinced of than this. It is still the 'pure and undefiled religion' to which a special promise is given. . . ."

Torquay remained our headquarters until August 13th, but we made various visits to other places. On that date I went to Malvern, leaving my dear wife to nurse Isabella Dundas. Little Annie Dundas was born on August 30th, but died in infancy.

This year was full of amazing events. Seven by seven days (forty-nine) only elapsed between July 15th, when the Franco-German war was declared, and September 2nd, when the Emperor of the French capitulated, with 83,000 men. In a little more than a fortnight the Germans had over 145,000 prisoners interned, of whom 4,862 were officers, and sixty-two of them generals. Such a thing was never heard of before in the history of mankind.

In the same month the Italian army entered Rome, and the last figment of temporal sovereignty was stripped from the Papacy.

In the same month England was thrilled by the news of the capsizing of H.M.S. *Captain*, with her designer, Captain Cowper Coles, and 528 men. This calamitous event was attended with incidents of extraordinary romance, three or four men being actually saved by getting on the upturned bottom of the vessel as she floated for a few moments before sinking. I knew Coles very well. His father was a clergyman in the neighbourhood of Odiham.

I remained at Malvern alone five weeks, and benefited very much by the water treatment. I got so strong, in fact, as to climb occasionally three times in one day to the top of the Beacon, an over-exertion which may have helped, I think, to originate my heart weakness.

On October 6th I went to Ireland till November 2nd. This visit was memorable for a discovery of great antiquarian interest, viz., the first and, as yet, the only Runic inscription found in the country, of which I have given a full account in the *Journal* of the Royal Irish Academy, and also in the *Archæological Journal*, Vol. XXVII. We began our excavations at the "Mount," near Greenmount, on the way to Castle Bellingham, on October 18th. On the 27th one of the

workmen put into my hands a narrow strip of metal, about 3·8 inch long, 0·6 inch wide, and as thick as a shilling piece. It was so encrusted with dirt that nothing appeared on the surface. He had picked it out of the earth thrown up from the excavation. I took it home to clean, and presently there appeared on one side a very elegant interlaced design, and on the other an inscription in Runic characters of (probably) the tenth century. Professor Stephens, of Copenhagen, "thought it to date from about the ninth century." I take the safe side :

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I refer to my paper for fuller details. As there are not many Runic scholars in England, the above reading and translation were not settled all at once, and I had much interesting correspondence with some of them. After I had left Drumcar a bronze axe, or palstaff, was found on the same spot on November 6th. This is, I think, at Drumcar. The Runic object was presented to the Royal Irish Academy.

After our visit to the Rathdonnells we stayed a day or two with Professor Humphrey Lloyd and Mrs. Lloyd, at Amherst (Ballybrack), and then crossed over to lodgings at Oxford. I was very eager to follow up my discovery by reading anything likely to throw light upon it, and I did, in fact, at this time read volumes of Irish annals.

Having a good many friends in Oxford, and a very strong academical taste, our stay there (November 2nd to 28th) will ever be remembered as one of the most delightful episodes of our life. Dear Dean Burgon was unboundedly kind, and took a great fancy to Emily and Maude. Walter Merry, Professor Rolleston, Montagu Burrows, among others, in their several ways added to the interest and instruction of the visit. I spent many happy hours in the Bodleian and the Camera and the Museum, so as to regret when the time came to go home.

Mr. Cardwell had invited me to call on him on November 24th, and then made the very pleasing announcement to me that it was the intention of Lord Kimberley to recommend me to Her Majesty for the governorship of Bermuda. I was aware that I owed this entirely to his friendly interests, and expressed my gratitude accordingly. He announced to me on January 21st (1871) that Her Majesty's approval had been given, before which we were not at liberty to talk of it openly, although it was, of course, no secret.

On March 24th my brother officers of the Royal Artillery did me the very high and rare honour of inviting me to a dinner at the Mess at Woolwich. I call it a rare honour as well as a high one, because it had not been paid to any individual for a good many years, and I cannot recall as many as half-a-dozen instances in the previous fifty years, but it is possible that I have forgotten or never heard of some of them. The chair was taken by Colonel Anthony Benn, my old schoolfellow, and my health proposed by Colonel F. Eardley Wilmot, my old friend.

I was gazetted April 11th, and embarked for my government on the 18th.

Here for the present I close this volume of Recollections. My daughters Emily and Maude shared our six years' residence at Bermuda, and Maude shared our subsequent residence in Tasmania.

Both Harry and Frazer were our visitors at the former though not at the latter place, so that I have reached the period of recent history within everybody's recollection.

The year of our residence in London after my release from office was a very busy one. I was elected in 1870 an honorary member of the Smeatonian Society of Civil Engineers, to which, I suppose, I belong still, and I dined with them two or three times: most social and agreeable the dinners were. I never reached the chair, which members take in rotation, and consequently was never called on to propose the traditionary first toast, in which profane words are used in a way doubtless thought humorous when it was formulated (1792), but which the ears of our generation are not accustomed to. Jervoise had to do it on one occasion, but did it in an apologetic manner, and with reluctance. There were twenty-two members and twelve honorary members in March, 1871, of whom I knew about fifteen personally.

I was also a member of a mixed society of clergy and laity constituting the club of "Nobody's Friends," an honour I owed to Ernest Hawkins. We dined together usually three times in the year. Sir John Coleridge was usually the chairman. On one occasion it fell out that he was absent, and I being the senior member present was voted to the chair. Lord Justice Bowen was to be received into the society, a measure of great formality. The neophyte always occupied the chair next the chairman. The latter, when dinner was over, was accustomed to look round the table, and, with well-feigned gravity, take notice of the presence of a stranger, whom he interrogated as to his reasons for being there. The latter, with more or less of wit and humour, pleaded an invitation,

and explained who he was, and gave some account of himself. This being done to the satisfaction of the members, the chairman proposed his health in a complimentary speech, and gave him the right hand of fellowship as a member of the society.

This little comedy was invariably enacted with much hilarity. The amusement consisted in seeing how different men would acquit themselves. I have heard very witty speeches and very dull, nervous ones. It is needless to say that Lord Bowen's belonged to the former category.

Another society to which I belonged was known as "Kempe's Meetings," and embraced a great many of the same members. It was a fortnightly meeting presided over by the Rev. J. Kempe, Rector of St. James's, and held in his schoolroom, but different from "Nobody's" in that eminent Dissenters were included. The object was thoughtful, respectful, but free discussion of questions not well suited for the pulpit in their political and religious or social bearings, and men of opposite views were encouraged to express them.

Dean Stanley was a man distasteful to most of the clergy. I have wondered to see him stand up, pale, but undaunted, to maintain opinions which were vile heresies to most of his auditors ; never losing his temper, though some of them looked as if they could tear him to pieces.

No votes were taken. The chairman at the end of the discussion simply summed up and indicated which way in his opinion it tended. All amenities of debate were sedulously guarded as far as externals went, but it is impossible to prevent heat in quasi-religious discussions.

Much of my time was occupied by the Patriotic Fund, and the school for officers' daughters at Bath ; especially the former. I was called to account for some decisions, supposed to be mine, so lately as 1889. It is "an excellent world to live in, to spend or to lend or to give in," but to guard public money and to resist imposition, it is still "the very worst world that ever was known."

I do not think I have mentioned among the most valued friends of this period Lord and Lady Hatherley. She was a niece of Lady Frazer's. I had known them since he was plain "William Wood," one of the most excellent and charming persons that ever lived. He was my co-trustee under the will of Augustus Frazer, and was a remarkable example of the advanced Liberal in politics, holding High Church principles. I can remember when a few eccentric people were to be met in London, chiefly in the City, who continued to wear the quene. Lord Hatherley was an example of an eccentricity

nearly as noticeable ; he never wore anything but an evening coat, what the Americans call a "clawhammer." In this his good grey head was to be seen every Sunday morning, hastening to and from the Westminster Sunday Schools, in which he was a humble teacher through life. We met many eminent persons at his house. One of the last I remember was Dr. Lightfoot, the learned Bishop of Durham, whose face is not soon forgotten.

Not there, but in the same street, Great George Street, I frequently met Lord Dundonald, the very famous Lord Cochrane of naval history. He was a constant guest of Mr. Walker's.

Lord Hatherley described one day with great amusement his surprise at receiving an unexpected summons to Balmoral. He hastened to obey. There was no Cabinet or apparent business ; but the next morning after his arrival, the Queen sent for him, and with a little embarrassment, conveyed to him that there was an affair on foot between one of her daughters and a young gentleman, who was a visitor at the time. It had not come to anything decisive. She wanted a judicious friend to keep an eye on the young couple, and be, as it were, an indulgent chaperon ! This delicate office Lord Hatherley was pre-eminently fitted to discharge, by the charm of his manner and conversation—and he did so with the happiest results.

A transaction, which came this year to a crisis in the War Office, and was known far and wide as the War Office scandal, is so instructive that I cannot forbear an allusion to it. Details will be found in the third report of the Public Accounts Commission of April, 1871, and Appendix Papers Nos. 162 and 162 I. of 1871. It had the effect of driving from the War Office, and from public life and in disgrace, three gentlemen of previously unblemished reputation, one of whom had been recently knighted.

The circumstances were these. The Inland Revenue allowed a small poundage to the officers employed in assessing and collecting the income tax, on the salaries of the Civil Establishment of the War Office and other public departments. As invariably happens when small sums are deducted by a paymaster from very numerous payments, whether as income-tax or anything else, he gets the benefit of the turn of the scale, and very small fractional differences in time accumulate to a considerable sum. Such was the case in 1863, when the commissioners from the War Office found that they had a surplus which they were not required by any existing regulation to return to the Treasury. They therefore, in the exercise of their own discretion, divided it among the clerks who had kept the accounts.

In 1868 the same thing occurred, but the accumulation now amounted to £1,500; and having ascertained that the Treasury had sanctioned in the case of the Army Pay Office the payment of officers doing precisely the same duty as themselves, by a percentage, they voted without further inquiry that they were entitled to a similar payment. Five senior clerks of the War Office, including the then Accountant-General, quietly divided this £1,500 among themselves.

The same thing went on to 1870. Doubts which arose in that year led to an official correspondence, and the Inland Revenue declared that it had been a misappropriation of public funds. The culprits, three of them still in office, and two who had retired, forthwith refunded all they had received, but this did not save them; and as I have already remarked, they were all disgraced. I felt extremely sorry for one of the three, who was, I believe, as honourable a man as ever lived, and whose profit by the transaction had been the smallest.

The way in which the exposure came about was in itself a remarkable feature in the case.

A clerk one morning walked into the room of Mr. Thompson (now Sir Ralph Thompson), who had been only recently appointed a commissioner, and handed him a cheque. "Why," said Thompson, "what is this for?" "Oh, it's your share of the income tax surplus." "I don't know," replied Thompson, "that I have any claim or right to take this money," and he refused to take the cheque, but brought the matter immediately to the notice of the higher authorities, and investigation followed.

The moral is never to shut one's eyes on dubious transactions, least of all when they are in one's own favour. It seems hardly credible that such experienced public servants should have fallen into such a trap.

On the 4th April dear little Archie Dundas died in London, his parents being in Egypt; and the painful duty devolved upon me, two days later, of taking his remains down to Larbert, where they were buried with Scottish rites on Good Friday, 7th.

On the 11th April I was gazetted governor of Bermuda, and we embarked for New York on Tuesday, 18th. We had a very bad passage, but were off Staten Island on Monday, May 1st, where we had to undergo a short detention and go through the unpleasant ceremony of being medically inspected. They did not vaccinate any of our party, but the crew and steerage passengers to the number of 1,000 were all subjected to this operation, in consequence of one or two deaths that had occurred.

Our party, besides myself and my wife, consisted of our two daughters, Captain Charles Trench, R.A., my aide-de-camp, and three trusted servants, two of whom, twenty-three years later, are still in my service.

The 1st May is of all days in the year the one most to be avoided for arriving at New York. It is the date at which people give up their houses or enter new ones, and the hotels are crowded to excess. We had considerable difficulty in getting even very bad accommodation at the Fifth Avenue Hotel, but the pleasure of getting ashore to a good meal and comfortable bed more than made up for all the inconvenience.

I made it my first business to find out General Burnside, U.S.A., and to ask his advice and good offices in purchasing horses. I had met him at dinner not long previously in London. He gave me a most friendly reception, and said he would put me into the hands of a professional friend of his, who would not allow me to be overmuch imposed upon, and would certainly secure me good animals.

Accordingly, accompanied by Charles Trench, we went round to several dealers and picked up two very fine horses. Trench also purchased a horse, and it was very amusing, on walking back to the hotel with our dealer, to hear him ejaculate half to himself, "Ah! that young man has got a horse." Strange to say, we all forgot to inquire whether the horse had been broken to the saddle. In England every horse is broken to the saddle before he is broken to harness, but the Americans are a driving and not a riding race.

On the 22nd June was the first meeting of the newly organized Church Synod, when a free-thinking tailor made himself rather obnoxious, and thought that the first thing for the Synod to do was to formulate its own creeds and rubrics. Luckily he met with no support.

We gave a ball on the 29th June, which, like most other things connected with the government, had a spice of originality about it.

The economical Bermudians, quite as fond of dancing in honour of the Queen's birthday as any other loyal colonists, had never, down to the time I speak of, provided the Government House with a ball-room; but some years previously, on the final cessation of transportation to Bermuda, the question had arisen what to do with the convict chapel, which was a hideous square-framed building, not so much as lath and plastered. This they at last transported to Government House and planted it down at a corner of the verandah, where it formed a useful lumber room. When a ball was to be given the lumber was cleared out, the floor was washed down, and it was made

a supper-room, the dancing was in the dining-room, because the floor of the old chapel was too rotten to allow of dancing. The nakedness of the roof and walls was covered with all the bunting we could beg or borrow. On one occasion I found to my horror that I was responsible to Her Majesty for a thousand pounds' worth of bunting.

On July 7th I laid a proposition before the Executive Council for holding a Colonial Exhibition. I found the idea rather popular. The only real difficulty was to provide for the safe custody of the exhibits and allay the suspicions of the owners of treasured objects, and induce them to permit them to be seen. I was so fortunate as to get ex-Chief Justice Darrell to accept the post of Chief Commissioner; and the idea was realized with great *éclat* the next year.

I also got the Legislature in August to vote a sum of money for the drainage and improvement of Pembroke Marsh. I was at this time very eager for utilizing this considerable expanse of level ground; and I had not realized, as I subsequently did, the hopelessness of redeeming it for cultivation. Little by little I found out the true facts relating to it; it proved upon boring to be nothing but a deep deposit of barren peat, containing a great deal of cedar wood; it rested upon pure sea-sand, and had been formed by long subsidence, in which the peat had gradually grown and kept up to the original level as the bottom grew deeper. It contained no alluvial soil, and the surface only produced a few scanty cedars, palmettos, and shrubs without value. In digging a ditch we came upon one object of curiosity, a partizan of the time of James I., which is now in the public museum; we also uncovered the trunk of a fallen cedar, much larger than any tree living in the island, which showed that the same geological conditions had prevailed for hundreds of years. The new ditches helped to dry the surface, but beyond this I am unable to say that the island derived any benefit from the expenditure.

At the time of my arrival the colony had almost completed a public improvement seven years in hand, from which great advantages were expected. This was a causeway connecting the Island of St. George with the mainland, and for ever putting an end to an extremely troublesome ferry, by which it had hitherto been necessary to pass from one to the other. It had latterly been executed by Lieut. Hime, R.E.; and it was intended to make the opening of it a very big and pompous affair.

Accordingly on the 19th September all available troops were concentrated at this spot, and nearly the whole population assembled by

boat and vehicle, from the most remote places, to do honour to the occasion. The day was lovely, and the animation of the scene was extreme.

I was very anxious to connect with it some religious ceremony, and managed to get all the schools and congregations to prepare by practising the fine hymn of Milton—

“ Let us with a gladsome mind,
Praise the Lord, for He is kind.
For His mercies shall endure,
Ever faithful, ever sure.”

Accordingly, everything being prepared, and the legislative bodies assembled, I presented myself at the causeway at 2.30 P.M., was received with salutes, and, as soon as Lieut. Hime had reported his readiness, led a processional march over the causeway and declared the road open.

Although humble enough in itself, it was probably the most striking ceremony that had ever been witnessed in the island. The people were very orderly, there was little or no drunkenness anywhere in the crowd, and congratulations were exchanged all round.

Our venerable rector, Dr. Lightfoot, returned solemn thanks next day that “so vast a crowd” had met and dispersed without any accident ; and the Legislature voted Lieut. Hime a handsome service of plate.

Mechanically considered, the thing was not a perfect success. The great swing-bridge, which allowed navigation at St. George’s end, warped a little, and made the operation of opening and closing it more difficult than it ought to have been. The rails and runners had more than once to be re-adjusted ; but it answered its purpose for nearly twenty years. We all drove home greatly delighted with the completion of an undertaking of very considerable magnitude for the resources of the colony.

We went home as soon as we had exhausted, with the help of our friends, the champagne provided, and had listened to the oratory, not quite so sparkling, which the leading members of the legislative bodies addressed to the assemblage.

Our short religious service went off admirably, especially the selected hymn, which was very well suited for occasions of this kind.

I had an admirable coadjutor in Colonel Bagot, 69th Regiment, who, as commanding the troops, necessarily took a very prominent part, and directed the military arrangements with as much gravity as if the scene had been Hyde Park.

It was a very pretty sight when, a little later, the joyous white-sailed boats followed one another in an interminable flight through what had been the ferry and dispersed in every direction. In the uncertainty whether the swing-bridge would continue to work, it was necessary to keep the ferry going for some months ; but I suppose that this convenience, which fills a considerable space in the early history of the colony, was by degrees forgotten, and there are probably many people who could not find their way to it.

On the 12th October Frazer entered New College, Oxford.

On 21st October I had my first military trouble. There was an officer of the Ordnance Store Department of considerable vigour and ability, but so wrong-headed and insubordinate that the head of that department, Deputy Commissary-General Scott, had no choice but to put him in arrest and report him to me. I became by degrees familiar with the operation, which always ended in the same way—a longer or shorter arrest, followed by a reprimand, which never had the least effect. This officer was naturally insubordinate and obstructive. Long after I had given up the command he was again in trouble, and wrote to me for a character. I replied that I would give him a character if he wished it, but it would only be that of having been the most insubordinate and obstructive officer it had ever been my misfortune to have to deal with. I heard no more of his request.

To give an idea of what does happen in the Army, I may mention that one of the regiments then in Bermuda boasted of a medical officer who was repeatedly reported to me by his colonel for gross and flagrant neglect of all his duties, and who was hung in 1888 for the cruel murder of his wife.

A great military scandal occurred towards the end of November, and I called upon Colonel —, who commanded the regiment, to hold a Court of Enquiry. I allude to the matter, because it was my duty to put the culprit in arrest. He had great interest at the Horse Guards, and never was such pressure as was brought to bear upon me to induce me to take a lenient view of the case. I steadily refused, and the culprit was forced to retire from the service ; but they did all they could for him by permitting him to receive the value of his commission. None of his own brother officers supported him. The morality of the Horse Guards, instead of being in advance of that of the service, was behind it.

I imported this year a great quantity of plants from New York. Nobody knew what would grow in Bermuda and what would not. Many of my importations were failures ; among these was asparagus,

which gradually dwindled away till we could hardly get a stick as thick as a pencil. Strawberries were not much more successful, but a great number of flowering and ornamental plants were established. I tried a number of magnolias, which flourish in the Southern States, but they all dwindled off and died away. The extreme uniformity of the seasons and want of a period of rest was sufficient to account for this, besides the poverty of the soil.

I had a very narrow escape of being drowned on the 26th November. Charles Trench had imported a birch-bark canoe from Halifax, which was lying off our bathing place. Having been very familiar with this craft nearly twenty years previously, I looked forward with great pleasure to an occasional paddle. The sea was pretty smooth, but not as much so as it looked, and I soon found the motion too much for me. I was upset some fifty yards from the shore, and with very great difficulty reached it, aided by the paddle as a float. There was a small cliff round the bay, and a coloured man climbed down the rock and managed to grasp me as I struggled in, the water being deep. I was, however, all but insensible. This man, ten years later, when I was travelling in New South Wales, where he had settled, recalled this service to mind, and I was glad enough to give him the reward which he declined to take at the time.

On the 9th December a skilled gardener named Middleton arrived from Kew and a labourer named Payne. These two men were a great expense to me, and certainly not worth it. The colony was too backward in matters horticultural, and the climate and soil and productions too entirely different from what they had been accustomed to at Kew, so that they did very little good, and had, in fact, their work to learn. I had very much hoped for some improvement in the treatment of grape-vines, oranges, Eugénias, and other semi-tropical fruits, but I found, they knew nothing about them. Middleton stuck to us to the end, but I soon sent Payne home. In mentioning above that my newly-imported magnolias failed without exception, I should have added that I discovered afterwards that there was one spot, Penistou's, on the north shore, where there were two or three very fine old magnolia trees, *M. grandiflora*, which flowered freely.

I have perhaps sufficiently indicated the great multitude of avocations to which, with the proverbial activity of a new broom, I turned my hand; but I have said nothing of those which I found gradually were cut out for me as Governor. The old Carolinian constitutions which still survive in Bermuda, in the Bahamas, and in a great measure in Barbadoes, are in most curious contrast with those which

exist in the old Crown Colonies proper, and in the modern ones which possess representative institutions.

Here the autobiography closes. The last pages were dictated only a few days before the close of my dear husband's life, and the task remains to me to fill up very briefly this record of the remaining years of labour, illness, and rest.

The six years' tenure of office as Governor of Bermuda was a very pleasant time, and he found much interest in his duties as Commander-in-Chief of the Troops, and in studying the botany and geology of the islands as well as in his duties as Governor. Having great sympathy with the soldier, he did his utmost to make his life less irksome, and to shorten the long periods of imprisonment for military offences, believing that certainty of punishment was more efficient as a deterrent from crime than long terms of confinement. He had much sympathy also with the negro population, and was frequently spoken of, partly in jest and partly in earnest, as the "Negro Governor," by those who despised this childish and impulsive race, who formed two-thirds of the population of the islands.

Writing to a sister-in-law, who had been left a widow with a large family, he says :—

" GOVERNMENT HOUSE, BERMUDA.

" *October 27th, 1872.*

" Our regular mails are suffering a slight interruption. The mail steamer from Halifax was nearly lost on her last arrival ; got on the rocks, and was with difficulty got off, with a hole as large as a window in her bow. She is now under repair at the dockyard, and the *San Francisco* under repair at New York, making us feel for the moment out of the world.

" I believe I have already said that I think you do very wisely to remain abroad. It must be very advantageous in respect to education, but still more so is it under a sorrow like yours, to have the silent communion of Nature, in place of the sympathy, however kindly meant, of many friends.

" The setting of a great hope is like the setting of the sun—then stars arise, and the night is holy. The heart is not alone when sacred influences steal about it, and breathe an unspeakable peace of resignation and love. How, I know not, but I am persuaded that it is not imagination which impresses the consciousness of a real spiritual communion at such a time with one ' we have loved and lost awhile.' "

To a sister who had recently lost a child he wrote :—

" GOVERNMENT HOUSE, BERMUDA.

" *April, 1875.*

" I did not reply to your very touching letter respecting the death of dear little Eddie, because I had already heard of it, and referred

to it in my letter of February. The ties of more than usually strong affection by which you were bound to him and he to you could not be severed without bitter pain ; but my feeling is that Heaven is the best place, and the perfect, sinless life the best life, and true love should rejoice when those about whose redemption there is not a shadow of doubt are removed early from the trials and dangers of this state. The true musician cannot better himself upon an imperfect instrument, and the harmonies of that little soul, now so perfect, were lost upon the broken chords of his. It is a true token of God's love to him and you, and infinitely better than a prolonged life of imprisonment below. I hope and believe that your mind will dwell more on this aspect of the case, and take comfort in the thought of going to him, and recognizing him, changed, yet the same, in the sphere where all pure or purified spirits will be visible to each other, as God will be visible to them."

During our residence in Bermuda we had visits from both our sons. The elder, a captain in the 44th Regiment, came home from India, and spent part of his leave in Bermuda. The younger, now a barrister in Canada, spent one vacation from Oxford with us.

Another event which gave great happiness to us was the marriage of our eldest daughter to my husband's aide-de-camp, Captain Charles Chevenix Trench, R.A., a son of the Archbishop of Dublin. Soon after the marriage, Captain Trench was promoted to major, and had to resign his post as A.D.C. ; but he was after a time moved with his battery to Bermuda, and remained there till after our return to England ; and thus we had the great pleasure of having our daughter again near us, and her father found increased happiness in the society of his first grandchild, and in witnessing his daughter's happy and useful life.

The Government House, Mount Langton, was small and inconvenient, and propositions were from time to time made to build a new and more suitable abode for the Governor. But the lunatic asylum and gaol were both miserable structures, and General Lefroy put aside all proposals for a new Government House until these necessary buildings were put into a suitable state. The lunatic asylum he had the satisfaction of seeing finished, and the poor sufferers placed in comparative comfort.

In March, 1877, shortly before the expiration of his term of office, he had a very severe illness, which left him much weakened and scarcely equal to the fatigue of the journey which he had arranged *via* New York, Washington, and Canada to England. Strength returned,

however, and he was able to enjoy the society of his friend, Professor Henry, at Washington, in whose hospitable house we were kindly welcomed.

At Philadelphia he was very much interested in visiting different schools, and he was specially pleased with one school taught by a young lady, who consented to give a lesson in our presence—in which task she acquitted herself with great ability and modesty.

A visit to Professor Asa Gray at Boston had also many delightful attractions ; for, besides our host's delightful conversation and cordial kindness, we had the pleasure of meeting several distinguished Americans—Longfellow, J. Russell Lowell, Professor Lovering, Sterry Hunt, and many scientific men.

We visited Niagara, spending two days at a most beautiful place close to the Rapids, belonging to Mr. Sutherland Macklin, and whilst there we heard that the Queen had conferred the honour of K.C.M.G. on my husband.

After spending three weeks in Canada, we embarked at Quebec on July 7th, and reached Liverpool on the 16th.

From this time until August, 1880, when Lord Kimberley offered the temporary government of Tasmania, Sir Henry Lefroy's health had never fully recovered from the shock of his illness in 1877, and he had intended to spend the winter in Malta. This offer of a voyage to Australia under such pleasant circumstances was therefore gratefully accepted, and he sailed in the ss. *Orient* on September 3rd, with his wife and daughter, Captain Hussey, A.D.C., and his servants—two of whom had accompanied the family to Bermuda.

To his sister, Lady Rathdonnell, he wrote :—

“ *August 12th.*

“ You will probably be surprised to hear that in three weeks' time I shall (probably) be on my way to Tasmania ! This is a secret, so please don't allude to it in letters to friends. When the Queen has given her approval it may be announced, not before. It is a temporary affair, and if it please God all goes well, we shall be back within a year.

“ The circumstances are simply that they want to stop a gap, and Lord Kimberley wrote to me yesterday to make the offer, which I gladly accepted, and am thankful to find that my dear Annie entirely approves of my having done so.

“ I expect to sail from Plymouth on September 3rd, by way of the Cape, and to arrive at Hobart about October 13th.

“ It is my custom to give myself very little concern about what

Providence orders for me. This offer came to me unsought and unexpected, and I am very easy in my mind. It cuts off many distractions, and promises much of interest and novelty. The voyage will not be very long, and as far as I am concerned I have plenty to do in it."

To his sister, Mrs. Seymour :—

"PLYMOUTH, *September 4th.*

"Here we are bathed in sunshine, with the sea like a mirror, and what little wind there is in the right quarter. No voyage can be commenced in a more promising manner. We did not leave Gravesend before 9 A.M. on Friday, but the few hours were well employed in getting everything into order in our cabins. The ship has been so full of visitors that it is difficult to know who our fellow passengers are going to be.

"It was very nice seeing you and Sophia quietly when the bustle was so nearly over, and we are thankful to think of you as cheerful and peaceful in mind, if frail and sometimes suffering in body. God will be with you and support you, and 'if the earthly house of this tabernacle' is dissolved, you know, and we know, that you have a better and more enduring inheritance. I trust, and I believe, that in God's mercy we shall be permitted to meet again ; but one cannot be blind to the growth of years and infirmities in all our generation. We have passed through life together, and death cannot long divide us. Underneath us are the everlasting arms, and I look around on a younger generation ready to take our places, and feel that it is just as it should be.

"God bless and preserve you all."

This dear sister lived till 1888, and only passed into the unseen world two years before her brother.

To his sister, Mrs. Ernest Hawkins :—

"SS. 'ORIENT,' *September 22nd, 1880.*

"I begin this letter betimes to post it at the Cape, where we hope to arrive on Sunday next, 26th. We crossed the line on the thirteenth day out of Plymouth, without having experienced anything like rough weather ; but it has been, for these latitudes, gloomy and chilly, with the S.E. trade wind strong against us. The idle, sleepy days under the deck awning, and summer weather generally, seem to have left us ; we have entered early spring.

"I wrote several letters from St. Vincent, where the heat was excessive. Next day, Tuesday, we coasted for hours along the shore

of St. Iago, not the side on which I landed in 1839, but a much prettier one. The verdure was a delightful contrast to the extreme barrenness of St. Vincent, and it was very interesting to see broad plains spreading out like a fan as they descended with a gentle declivity to the sea ; evidently ancient lava-floods, but now thinly clothed with grass—no trees.

“We have had two concerts ; the first, which was given by the second saloon passengers, was I thought the best. I fancy they have several music masters and mistresses among them. But ours was very successful too, thanks chiefly to —— having, at the request of several of the young people, taken upon herself a general management. . . . Our captain is an extremely good specimen of his class. He began life in the Indian navy.

“There are plenty of books, two pianos, an organ, and a violin or two. I cannot help feeling that the first-class passengers have rather disproportionate advantages, though it is not easy to see how they could always be extended. For example, the exclusive use of the saloon deck, 150 feet long, the second-class being crowded in a narrow section much encumbered by hatchways, windlasses, etc., on the main deck. On the other hand, if they had an equal right to the saloon deck it would be so crowded as to be of little use to either, but I think it might be arranged to give them a turn.

“A young barrister and his wife, whose prudence has taken second-class tickets, excite my commiseration.

“We left Plymouth with first telegrams of Roberts’s¹ success. I hope they have made him a baronet. The Army has two generals after all, and one of them is an Artillery man.

“It is a curious sensation to be flying away from the news of the world, and to know that we must be eight weeks without letters, and then they will be only a fortnight later than our parting. However, we shall get telegraphic summaries at the Cape, where I expect to find a friend in the principal publisher. Sir George Strahan will have probably arrived before us by a few hours only. He left, I believe, the same day, but we have been reducing speed to avoid a night in Table Bay.”

“GOVERNMENT HOUSE, HOBART, TASMANIA.

October 23rd, 1880.

“MY DEAR ISABELLA,

“You will be glad to hear of our actual and safe arrival at our journey’s end on Thursday, 21st. We had an exceedingly rough

¹ Now Lord Roberts.

starting from Melbourne, which sent poor M. quickly below. It had been very stormy all day, and the wind, meeting the current through the narrow passage called the "Heads," about forty miles from Melbourne, raised a very heavy sea, which washed over our decks. But it went down after a time, and the next day, 20th, was smooth. I took the New Zealand steamer, *Ringarooma*, which touches at Hobart, in preference to the small local steamers, but she was very small herself after our magnificent *Orient*.

"We were just three days at Melbourne; two of these at an hotel and one at Government House. Lord Normanby was snipe-shooting in Gippsland when we arrived, and we were not sorry to have a quiet Sunday.

"Monday forenoon was devoted to the Exhibition, opened three weeks ago, but not nearly ready even now. It covers thirty acres, and no doubt will be a fine one when complete; very much like all its predecessors in miscellaneous contents. The Queen has sent a considerable number of pictures, but none of much value. The foreign pictures are very poor.

"The courts of the several Australian colonies interested me most. I send you catalogues of the West Australian and Tasmanian exhibits. Enormous nuggets, great cubical masses representing all the gold found in different colonies, appeal strongly to the eye; but after all, if some one made an enormous beehive representing all the honey made in one year, it would be quite as surprising. I think the largest represented £144,000,000 of gold! We were also pleased with the cubes:

- | | |
|--|------------------------------|
| 1. representing all the silver | } in one million sovereigns. |
| 2. " " copper | |
| 3. " " pure gold | |
| 4. " one million sovereigns. | |

"There was a simplicity about this. The largest (No. 4) was over a yard square.

"In the afternoon the Normanbys sent us a drive through the fashionable suburb of Toorak, so like and yet so unlike a wealthy English suburb as to be very striking. Gum-trees are a wretched substitute for English park timbers in respect to foliage, but there are plenty of better trees in plantations, and we passed some very fine places owned by people of large fortune.

"In the evening we all went to a large full-dress concert of the 'Liedertafel,' a local musical society. It was Lady Normanby's first appearance in public for three years. The music was very good, the hall and its decorations splendid.

"Next morning, 19th, I went over the great Melbourne Observatory before breakfast—a telescope 14 feet diameter, and in every respect one of the largest and best equipped observatories going. So you see our seven weeks' voyage has brought some interest.

"We saw something of St. Vincent, Cape Town, Adelaide, the capital of South Australia, and Melbourne."

"This place beats them all in beauty. I look out of my window over a terraced garden with a land-locked harbour beyond, surrounded by hills that may almost be called mountains. One of them is in fact 6,000 feet high, though it does not look it. One side of our grounds is an arm of the sea about a mile wide, very much like a beautiful loch with very picturesque hills. There is a boat-house, but whether it contains a boat is more than I can say.

"The house is fully furnished, and sufficiently handsomely, although not splendidly, like the Palace at Melbourne, where the ball room is 150 feet by 55 feet, if I remember rightly; ours is about 80 feet by 30 feet. We have had nothing but cold wind and rain since the first day, and have hardly been out. Fancy a kitchen garden of four acres! What is one to do with it?"

"HOBART, *October 24th.*

"MY DEAR ANNE,

"... I have now to report our safe arrival here from Melbourne, which we left on Tuesday, 19th. We were about forty-six hours only between the two places in a New Zealand steamer, and we might have done it in much less, but the captain was timed to arrive at 10 A.M., to fall in with the arrangements of a public reception, of which I send you a very full account. Nothing could have been better or more warm and cordial. I fancy that our friends the Gore-Brownes have prepossessed them in our favour. . . .

"We were promptly driven out to Government House, and had three or four hours to unpack before receiving Ministers and being conducted back again to the town to be sworn in. We found the Chief Justice, Sir Francis and Lady Smith waiting to receive us, fires lighted, a small supply of everything requisite laid in, and, in fact, the greatest consideration shown. . . .

"I was rather disappointed with Melbourne after all I had heard of it. The public buildings are splendid, the streets unusually wide, the parks and public gardens are all on a grand scale, but it is full of inconsistencies. Its great wealth has come too suddenly, and the character of a first settlement cleaves to it. You see one and two storied houses of a very modest character mixed up with all its

splendour; and shanties hardly better than a street in Drogheda just off the main thoroughfares. We observed the same at Adelaide. The labouring classes have the tiniest cottages you ever saw. Melbourne, as you know, is the stronghold of the most advanced democracy wielded by Mr. —, ex-auctioneer. It is always on the eve of a crisis, and is so now. I don't, however, know the precise question. . . . The Ministry are people with whom the Governor cannot associate in any way, . . . and now they have passed a measure to pay each member of Parliament £300 a year, so as to bring in the most needy and unscrupulous professional politicians and ensure the subserviency of the House to the Ministers. It is a very bad look-out for Victoria.

"We have had nothing but wind, and very cold wind, off the southern ice, since we arrived, with a good deal of rain, but it is delightful to see the early spring vegetation—laburnum, English may, lilac, and a number of other flowering trees and shrubs, mixed with Tasmanian and Australian plants, half of them as yet unknown. The weigelia is in masses, all the fruit-trees are in flower. There is no end to the roses, jasmines, tacsonias, tecomas, and so on, all over the place.

"The house is rather too large. I have just paced the distance from Annie's room to mine—it is full fifty yards.

"We are buying horses and cows. To-day about thirty volunteer officers in uniform paid their respects. Our carriage is just landed, and we hope in the course of the week to be settled."

TO THE SAME.

"HOBART, *November 27th*, 1880.

"We have just returned from a first official visit to Launceston, an affair of much ceremony and importance. I had two addresses to receive and three or four speeches to make, a levée, a drawing room, a volunteer parade, and an agricultural show. It all passed off, however, very well, the only *contretemps* being an alarming runaway. My dear A. was being driven by the Colonial Secretary, when the horse ran away and swung the carriage from side to side of the street in a way that must have led to a smash if it had struck anything. Fortunately, Mr. Moore, the Colonial Secretary, is one of the biggest and strongest men in the colony, and he succeeded at last, with the help of two people in the street, in pulling up. I was in another carriage following, and quite powerless to help, but I never saw a worse case. Thank God, A. preserved her nerve and coolness, but the shock has made her ill since. . . .

“Launceston is the rival city to Hobart ; there is excessive jealousy and rivalry between them. We are obliged to be extremely careful to avoid offence by appearing to favour one more than the other. It is the centre and shipping port of the gold, tin, coal and bismuth, and is destined, I think, to eclipse Hobart in the long run. Population about 15,000, against 20,000 here. Its disadvantage is being forty miles up the Tamar, which, although navigable for ships of some size at high tide, is a narrow stream not adapted to very extensive trade. The country is beautiful, but the railway would astonish you—such gradients and such curves I never saw.

“I had, of course, all the magnates introduced. Some of them are enormously wealthy from lucky purchase of gold mines. —, a plain, worthy man, is reputed to have £30,000 a year, and probably lives upon £1,000 ; there are no means of spending such sums here at present. The mayor was said to be nearly as rich. As yet none of this wealth has flowed into public objects, but that will come in time. There are men owning 20,000 to 40,000 sheep and enormous estates, who began the world as labourers. Notwithstanding all this, there is the universal outcry that young men go elsewhere to seek fortunes, and one might suppose the country to be on the verge of ruin. The truth, I fear, is that the foundations of wealth are generally laid in humble pursuits and laborious habits, to which poor men are born, and for which they are trained ; while the habits, expectation, and pursuits of the gentleman are more and more unfitting him for the competition.”

“TASMANIA, *December 12th.*

“MY DEAR ISABELLA,

“ . . . To-morrow we start for the Huon, which you will see by the enclosed map is a little to the west of Hobart. We go to Franklin, which is as far as there is a good road, and not so very good either. However, we are going to take the coach, and the Premier and the Colonial Secretary accompany us. There will be the inevitable address and speech ; then on Thursday a conferring of degrees and public luncheon.

“Some of our happiest hours have been in rambles among the valleys at the flanks of Mount Wellington, which abound in flowering shrubs and ferns. The last ramble was to get some maidenhair plants, very abundant in some places. We picked up a little girl who spoke with a strong American twang, and she conducted us a good way across a mountain stream which was the scene of an alarming flood some half dozen years ago.

“It is impossible to describe the pleasure of coming upon

beautiful plants that are new to one. We found the local 'lilac,' which is not the least like a lilac (proper name *Prosanthera*, from a little appendage to the anther, only visible under a microscope), and two or three more.

"Near this spot is one of the best fruit farms in the island, about thirty-four acres under orchard; 200 apple trees to the acre is the rule, and they yield from one to three bushels each per annum. Seventy to eighty pounds an acre is a fair and not excessive return; but it is not every one who understands fruit culture, or has the right soil, or can afford to invest his money four or five years before he gets a full return. They grow every other kind of fruit, too, especially gooseberries; I never saw such immense ones or in such quantities. These are sent in 50 lb. boxes to Melbourne to be manufactured into jam. The Victoria tariff admits the fruit duty-free, but charges a very high percentage on jam of Tasmanian manufacture. It was pretty to see the women and children picking the fruit in a half-ripe state.

"We are still complaining of the chilliness of the weather, regarded as summer, and they say it is unusual; the last two evenings we have had a fire. Meanwhile, we are reminded of our nearness to the Tropics by a box of fresh pineapples sent by one of our fellow-passengers from Sydney, but grown in Queensland. . . .

"I have never given you the description I promised of this house. It is built of a cream-coloured sandstone, in what I call the Baronial style. On two sides is a wide terrace-garden, commanding beautiful views. You enter under a fine, well-proportioned tower into a hall, with cloak-rooms on either side; out of that, at right angles, into a corridor, which has on the right my offices, on the left the suite of state rooms. Upstairs the rooms are legion. This will convey the idea of a large house; and so it is, but its accommodation is the least thing. The Government House at Melbourne is twice as large. It is its architectural beauty, good arrangement, beauty of situation, and fine offices that make this, by general acknowledgment, the best Government House in the British Colonies. The only fault found is that it is too large for the salary. Upon this point we are not yet in a position to have a decided opinion. Hussey, my A.D.C., is a first-rate manager.

"Immediately outside our domain comes a public park of about 120 acres, called the Queen's Domain, a long ridge covered with gum-trees, which divides us from the town. Annie and I often stroll in it. Our garden was cut off the Botanical Gardens, to which we have an entrance. Lastly, we have the sea on two sides, and lofty

hills all round. The sea is an estuary a mile wide, and looks like a lake. We have just cut our hay. The garden is full of fruit, especially cherries, which are very fine.

“The conditions of external enjoyment and pleasure would all be fulfilled if we had but our friends near us, and our dear little grandchildren from Shoeburyness to eat our strawberries and cherries.”

“December 17th.

“ . . . I had intended visiting the mineral districts in the north during this month, but engagements at headquarters multiplied so much that I could not make the time for a long excursion, and took instead a short one in the western district to the Huon River. A drive of thirty or forty miles might appear a small matter, but here and with the Governor it is a serious affair.

“We had many discussions whether we should or could take the coach. It is not that the road is so bad—it proved a much better one than I expected; but it winds round the spurs of the mountain, with steep descents and sudden turns, and it certainly would be dangerous without good driving.

“Anything more beautiful it would be difficult to find. The clearings are few and far between; the road is cut through the forest and lined with an infinite number of flowering shrubs. Here and there you look into glades and thickets of tree-ferns, which, in fact, are met with more or less all the way. The gigantic size of the stumps in some of the clearings fills one with amazement. Trees six feet through are common; immense half-burnt trunks strew and encumber the ground, with orchards and raspberry plantations springing up among them. There is no village, only a few scattered houses, until we reach Victoria on the Huon, where we stopped at a comfortable little hotel, which barely took in our party, the Premier and Colonial Secretary being of it.

“Here I had to receive an address—Governors being rare visitors. Next day—Tuesday, 14th—our real triumphal progress began. We passed under four arches in about ten miles, and received three or four addresses. Four schools were drawn out on the roadside. At one of these every girl and many of the boys had brought a bouquet; we had to take them all, and half filled the coach. In fact, women and children were continually darting out and throwing bouquets into the coach. This was their welcome to Annie and Maude, the first Governor’s lady and daughter they had ever seen, and ——— looked very bright on her high seat.

“We were preceded into Franklin by outriders and a band. We

drove to a place called Honeywood, and there exchanged the coach for a truck on a rude tramway, by which timber is brought down from the clearings. Anything more beautiful than this part of the journey cannot be imagined; we could snatch at tree-ferns and gleichenias as we rode along.

"We found the pride of Australia, the waratah (*Telopia*), in flower, and we were conducted to one gigantic 'stringy bark' tree (*Eucalyptus obliqua*), which is over forty feet round at six feet above the roots. I hope I have made arrangements which will preserve this tree for posterity. We had started at a quarter to ten, and did not get back to our hotel before six, rather tired, but greatly delighted.

"Next morning we rowed some little way up the Huon, which is 200 yards wide, but were overtaken by a drenching shower, and had a long ramble on the flats, which abound with orchids, not the showy things which you see in greenhouses, but very pretty for all that. I dare say we brought away twenty varieties. We had a wet drive home.

"There is something very pleasing in the simplicity and English-like heartiness of the people here, quite free from offensive forwardness, but thoroughly independent—rustic, but not vulgar."

"January 29th, 1881.

"I don't keep any journal, and often wish I had done so, or could do so now, but it takes too much time. Instead of journalizing, I will give you an account of our trip the other day in the *Rotamohana* to Port Arthur.

"Port Arthur was founded as a convict station in 1832, and only finally given up about eight years ago. In the forty years that it lasted untold sums were expended there and untold miseries endured. The officer at its head was Rhadamanthus personified, in incarnation of unflinching severity 'on principle,' utterly without an idea of controlling criminals except by the lash, but humane and just, as far as he knew, to those who submitted to his discipline.

"The place is about forty-five miles from here, on Tasman's Peninsula (twice as far by land), and there is no regular communication with it, for the simple reason that there is practically nobody to be communicated with: only a few settlers on the whole peninsula; no magistrate, no minister, no doctor. What little dealings they have with the world is done by fishing or freight boats.

"Well, it is the fashion once or twice in the season to get up an excursion there on a large scale, for the sake of the little sea trips through the estuary of the Derwent, and to see Cape Raoul and the

entrance to D'Entrecasteau's Channel and other historical sites. This time, on pretence that I wanted to go there, which was a mere pretence, the agent of a New Zealand company detained their ship, the *Rotomahana*, with about 300 passengers, on their way to Melbourne, twelve hours to send her down there, the officers of the ship, and the passengers generally, being very willing; and fully 600 people of Hobart were taken down besides. We left Hobart at nine—a lovely morning. Miss North, the artist, who has just arrived, was one of the party, and we had all the notabilities and visitors of distinction on board—Madame de Virgins, wife of a Swedish admiral, who brought introductions from Lord Kimberley; her son (by a former marriage), Count; Ehrensward a Melbourne beauty, Mrs. R.; the Roman Catholic Bishop of Sandhurst and our own Roman Catholic Bishop, with half-a-dozen minor dignitaries, who have been taking part in the re-opening of their cathedral after some extensive alterations; together with the best of local society.

“The ship was, of course, much crowded, but we had the saloon-deck reserved. Our voyage down was very pleasant. We passed close under Cape Raoul, a huge basaltic promontory 400 or 500 feet high, very remarkable for the regular pillars, which in many places are isolated, and stand up as distinct as chimneys. In fact, all the capes and promontories had that character until we rounded into Port Arthur, when the formation changed to sandstone in horizontal strata, as regular as courses of masonry.

“We got there soon after twelve. It is a magnificent harbour, and the deserted convict station occupies a lovely amphitheatre, embosomed in hills. Empty houses and gardens run wild, stretching in every direction. Only a few people from the surrounding country had come in to see so rare a sight.

“The water is so deep that our big ship was brought in very skilfully to within fifteen or twenty yards of the rocks, and we got on shore over a barge which had been moored as a jetty. There is a large pier, but recent storms have damaged it much. We landed at the Commandant's house, and walked through pleasure-grounds, once kept up by unlimited convict labour, to the ex-penitentiary, the model prison, the barracks, the hospital, the church, a whole village of warders' houses, workshops, a tannery, all as silent and deserted as Pompeii, all built of cut stone, in a style to last for ages.

“People rambled about and gathered fruit off no-man's orchard, I took a walk with Hussey and the one official left in charge along a road which leads to the neck of the peninsula, where, some ten or

twelve years ago, they kept a chain of big dogs to give alarm if any convicts attempted to escape—a macadamized road, now completely grass-grown.

“We finally got off again at half-past three, and reached Hobart at seven. I had to take the chair at a public meeting at half-past seven, so the day was well filled up.

“One of the priests said to me, ‘What a place for a monastery!’ ‘Yes,’ I replied, ‘we’ll present it to you for the Jesuits, if you will put them all there.’ His reverence mildly replied, ‘It would rather suit the Trappists,’ and accosted me no more.

“I had some conversation with the Bishop of Sandhurst, who is a dignified old gentleman, about the state of Ireland. He insisted much on the high rents exacted of the peasantry, and said they ought to take Griffith’s valuation, but did not deny that many of the men who refuse to pay their rent have comparatively large savings in the banks. He also affirmed that the famine last year was most grievous, and that but for the succour sent from America and Australia, many must have starved to death. It is hard to get at the truth as to this. He had very little condemnation for the murders and atrocities of the Land League, but, of course, did not defend them.

“We are very anxious to learn what the Government measure is, and how far Gladstone is prepared to go.

“Miss North comes to us to-morrow.”

“HOBART, *April 3rd.*

“I am rather divided in my mind between writing to you and watching a live platypus that we got two days ago. On the whole, duty prevails. Let me tell you that a live platypus is a creature few persons have had opportunities of studying, and I do not know that I could justify such a decision to Philip Selater, but I have visited him, and got him worms and slugs, and spiders and beetles, several times this morning.

“Platypus is about a year old, not much larger than a large rat. When wet he squeezed his body through a hole about two and a half inches each way. Whether he is curled up asleep, or routing for worms like a duck, or looking at you with his little black eyes over his absurd flat nose or beak, he is equally endearing.

“I returned on February 26th from two weeks’ absence. I went as far as Circular Head, near the extreme north-west corner of Tasmania. The distance is not above 250 miles, but difficulties of communication make it an undertaking. I received no less than fourteen

addresses, four of them in one day. The north-west coast is a peculiar region, lying on the great line of traffic between Hobart and Launceston, rarely visited by governors, and in a chronic state of bad roads. It is, however, the quarter to which gentlemen settlers of small means mostly go, from the richness of the soil, and because one draws another. The forests are wonderful, and contain many ferns not found in this part. Trees 150 feet high are not uncommon. I measured one 60 feet round.

"All the yeomen and gentlemen at each considerable place met me a few miles out on horseback, and escorted us in. There were triumphal arches at Table Cape and Black River, and speeches everywhere. All this was amusing, if rather fatiguing. Then I inspected schools and other public institutions, visited fossil beds, and generally kept on the move.

"By far the most novel and interesting part of the tour was the travelling on tramways off the main road into the bush—one near Mount Roland, a wonderfully bold, steep mountain of 3,500 feet, with a newly discovered gold-field at the foot of it; another to some timber mills up the Don Valley, through acres and acres of tree ferns; another, and the most important, from Emu Bay to Mount Bischoff, forty-eight miles, to see the richest tin mine in the world, which was discovered by a man known as Philosopher Smith, about five years ago. The mountain is a bold summit or peak, 2,500 feet high, overlooking a boundless expanse of unbroken forest. It has been pretty well cleared of wood, but is covered with undergrowth, and towards the foot, on one side, has still an almost impenetrable thicket of the dreaded "horizontal," which I saw for the first time. A mile a day is good progress in horizontal, but we passed through by a path which had been cut.

"It would take a small volume to describe half the wildness and novelty of these southern backwoods, so like the northern, yet so different. The primitive character of the country inns is most amusing, but people are extremely respectful, and make great exertions to do credit to their village in receiving and entertaining the Governor.

"Dear little platypus was killed last night. Alas!"

"HOBART, *April 17th*, 1881.

"I trust that your vernal Easter Sunday is as fine as our autumnal one, and finds you peacefully happy and contented, seeing the shadows lengthen, and waiting for the dawn of a new day."

“April 28th.

“Our young people have had something that nearly amounted to an adventure.

“On Monday last Maude and the two daughters of Sir William Jervois (Governor of South Australia), who are staying with us, my A.D.C., and George joined a party to go up Mount Wellington. They started too late in returning, and were on the shaded side of the mountain. The sun set, it was a cloudy night, and in a very short time they were in pitch darkness. The Chief Justice and his son were guides, but they got off the track on a very deep descent. Fortunately Sir Francis Smith had told the woman at the little inn halfway up that he meant to return that way, and, knowing him to be a man of his word, she got alarmed, and about a quarter past seven set off, with a boy and a lantern, up the path they ought to come down, coo-ee-ing loudly. After a time they heard and answered, and so she led them all to her inn, where they arrived at eight, very wet and very tired, Lady Smith, in particular, quite overcome by nervous excitement and anxiety.

“Meantime we had, of course, become anxious too, and I sent off a groom to Sir F. Smith’s (two miles) for tidings. He returned with intelligence that they had not turned up. I immediately started myself, and got to the Smiths’ house by nine o’clock. I then drove on, intending to go up to the little inn, but I had hardly left the gate when we heard the sound of a carriage on the hard road, and it proved to be mine, with the party safe. The others were not far behind. So ended the adventure. Everybody declared that the young ladies behaved splendidly.

“There were eight ladies and four gentlemen on foot (excepting halts) for nine hours.”

“May 20th, 1881.

“The mail has just come in, nearly a week behind time, from the same tempestuous weather which obliged the *Bacchante* with the young Princes to put into Albany for repairs, and has delayed their arrival in these regions.

“Our friends, the Jervoises, were on their way home after a month’s visit to us, and came in for the full of it. They were nearly lost, but managed to get under the shelter of a small island in Bass’s Straits, where they rode it out.

“I have just been paying an official visit to a Japanese training ship full of cadets with two English officers, all the others Japanese. Captain Fukuhima does not speak a word of English, but two or three of the others speak a little. They gave us an exhibition of

sword-play, which was most curious. The ship itself is a small English-built man-of-war, and in all her arrangements like our own. The men are diminutive. They have just come in time for the Queen's birthday."

"September 27th, 1881.

"Two days ago I attended the first agricultural show of the season, the great exhibition of Merino sheep. There was a ram there valued at 700 guineas, and this price is often given for Tasmanian stock. At a sale in Melbourne lately three of our sheep-masters got prices over 300 guineas for rams. The fact is, this temperate climate is able to keep up its stock. In the great heats of Australia they degenerate, and, like the Australians themselves, require to be constantly recruited with fresh blood. One feature of our agricultural shows is always attractive—the trial of hunters. They do not put up flimsy hurdles, but a strong four foot and rail fence, such as bounds all the fields, and on each occasion I have seen heavy falls, but nobody hurt."

"November 13th, 1881.

"Our departure is so imminent that my room is full with half-packed boxes. . . . I have accomplished two things within the last few days which had been too long postponed—the ascent of Mount Wellington and that of Mount Rumney. Mount Rumney is an insignificant hill of 1,000 feet, but somehow it has got a name for being difficult. It is very steep at the top, and being across the water people do not get to it so readily as to 'the mountain.' We took A. on horseback most of the way, and were rewarded by a wonderfully fine view over deep undulations of the shore.

"Mount Wellington is much on a par with the Righi, but steeper and rougher. The carriage road only takes you 1,100 feet of the ascent, but I rode the next 2,000 feet while the rest of the party walked.

"The party was Judge Dobson, Rev. J. Whall, George, and myself ; but it was on November 9th, which these loyal colonists keep as a public holiday, and we found happy parties all the way.

"Leaving the carriage road at a point about three and a half miles out of Hobart, you ascend about 1,200 feet in less than a mile to the 'Springs,' where there is a hut ; then it is 1,700 feet to the top, most of it very steep. But I managed to get my pony up a good way, and then left it with a groom. We went across 'The Ploughed Field,' a track of basaltic boulders, the ruins of former cliffs, not softened by a particle of soil. A succession of strides and jumps, or climbs, for a couple of hundred yards or more across a pretty steep ascent,

and then we were on the top, although still a mile from the pinnacle. The summit is an extensive tableland very like a Scotch moor—boulders intermixed with patches of bog and Alpine vegetation, and pools of water with groups of basaltic columns, rounded and weather-worn, standing up in places. You see nothing but distant mountains, many of them covered with snow, until you get to the edge, and then on the Hobart side, where none of the secondary ranges are above 11,000 feet, and water comes in everywhere. The view is truly beautiful. We rescued a damsel in distress, who had lost her party and her way. The danger of the latter is rather serious if a sea-fog comes on. People have been lost, and have perished, and others have had to pass the night there. If you have no compass it is impossible to follow the slight traces of a track in the dark or in a fog. . . .”

“GOVERNMENT HOUSE, MELBOURNE,

“*November 29th, 1881.*

“ . . . We took affectionate farewells of our Tasmanian friends, and they all turned out to see us off from Hobart at eight in the morning. The addresses were many and flattering, one of them a real work of art, beautifully illuminated on vellum, as a banner screen. . . .

“We have just been to an organ recital, the instrument being one of the great organs of the world. Very fine it is. I am writing with the ‘Kelly armour’ littering the floor of the room. This armour was made out of ploughshares by a country blacksmith to protect the bushranger Kelly, who was hanged last year.” Very curious it is. There are several bullet marks on it, so it answered its purpose.

“I cannot say that I care much for Melbourne. Its splendour is rather relative than positive—wonderful for so young a capital, but very unequal. Its great extent is fatiguing, and the dust and glare beyond belief.

“Lord and Lady Normanby are very friendly and hospitable.”

“SS. ‘CARTHAGE,’ AT SEA,

“*January 10th, 1882.*

“We greatly enjoyed a quiet fortnight at Marble Hill with Sir William and Lady Jervois. You may remember his visit to Drumcar in 1859, when we were on the Fortification Commission. We did very little in South Australia, nor is there much to do. The interior of the country is too far off, and, except near Marble Hill itself, there is no attractive scenery.

“ . . . Our vessel, the *Carthage*, is the largest the P. & O. have built. If five similar ships were moored side by side their saloon decks would cover just one acre.

“ We have the old Bishop of Adelaide, Augustus Short, on board. He is eighty, and has resigned the See, but is a cheerful, fine old man. I attended a public meeting held to present him with an address, and it was truly gratifying to witness the universal respect and regard evinced. All the Nonconformists attended. This was the fruits of prudence, moderation, piety, and activity, disarming opposition, and winning the personal esteem of those who were most opposed to episcopacy ; for you may remember that Adelaide was founded on principles very much like those of the Pilgrim Fathers. Some of the best people were Germans who left Prussia for conscience’ sake, when the King tried to coerce the old Lutheran party by the hands of Krummacher, and the appointment of any bishop at all was vehemently resisted. Now all this is changed, and they ‘ my lord ’ him as much as anybody.”

“ GALLE, CEYLON, *January 23rd.*

“ We arrived here this morning, or rather got ashore this morning, for we sighted the lighthouse at 9 P.M. last evening, just after evening church, which was concluded by one of the most striking short sermons from the old Bishop of Adelaide that I have ever listened to. He had not preached for some time, but lifted up his voice with effort for such a parting sermon as ‘ Paul the aged ’ might have pronounced. . . .

“ This is a very striking place, an epitome of Oriental life, with a background of old Dutch colonial monuments, as quaint and out of date as the natives themselves. The hotel is thronged with people offering false jewellery and every sort of rubbish, all good-natured and smiling, and unabashable ; inexhaustible in lies, but with the manners of gentlemen.

“ We take the stage for Colombo to-morrow morning at five, but our future movements are much thrown out by the strict quarantine in Egypt. Lady Ferguson’s death will do more to prolong the alarm of cholera than if a whole bazaar of natives had been carried off. The young Princes are expected on Friday, and Sir James Longdon has, we hear, kindly included us in his arrangements, so our next letters may have something to relate.”

“ LABUGAMA KRAAL, *January 31st, 1882.*

“ Take notice that I date from Ceylon, or you may suppose I am in Zululand. This is a kraal for catching elephants, and we ought to have caught them by this time ; but torrents of rain last night put

the fires all out, and they have broken through the line of beaters, but, as we hope, not to escape entirely.

“By great good fortune our visit here has coincided with that of the two young Princes. The Governor most kindly puts us in for everything, and we not only see all that is set up for their amusement, but as much of them as is possible without being in the same house; and this is, of course, the best part of it. I shall not live to see Prince Edward King, but Maude most likely will, and will like to remember that she won two games of tennis with him against Prince George and Miss Welby. He is the most amiable, simple boy of seventeen I ever knew, with much of his mother’s sweetness of smile and gentleness of manner.

“We landed at Galle on Monday, 23rd, and next morning started at five for Colombo, by coach (which I engaged for ourselves), driving about forty-five miles through groves of cocoa-nut, banana, jack-fruit, and all manner of strange plants. Several times a huge, ugly iguana would start out of a ditch, and the paddy fields were all new to us. We breakfasted at Bentota, a rest-house halfway, and got in by half-past eleven to the present terminus of the railway at Kalutara, and ultimately reached Colombo by two. Our friends the Bruces had borrowed for us a house belonging to the Colonial Secretary, who is absent. . . .

“On Saturday we started by special train with the Princes to Kandy. Royal personages always ride on the engine up the great pass to see the views to the best advantage; and, as the Governor did not care to do it, I accompanied Prince George and his tutor. The Prince turned on the whistle and shut off the steam as directed, and, in fact, drove the engine, to his great delight. He is a very lively, boyish little fellow, full of spirits and self-confidence, very active, and a gentleman.

“The object of this hurried visit to Kandy was to see a great Perannarra, or torchlight procession of elephants, accompanied by masqueraders, and all manner of wild barbaric merriment, the weirdest, most extravagant thing I ever witnessed. We sat in front of the Governor’s pavilion, and saw the torches approach through a dark avenue of trees, with a roar of tom-toms and screeching pipes, some borne by men on elephants, swaying with their motion high above the crowd, others by men on foot, and mixed with flags—nearly everybody carrying one. Then the great elephants became visible, with red trappings, and five or six men astride on each. Then a set of wild dancers broke out of the crowd, beating their tom-toms as if possessed, and performed before the Princes. Then more elephants, to the number of fifty-three, more dancers, and a mixed multitude of many

thousands defiled past, emerging from and re-entering the darkness with a deafening noise, for more than an hour.

“At last it was over, and then came what I had looked forward to with more interest—a visit to the Buddhist temple, and the exhibition of Buddha’s tooth. Short of handling it, which is impossible, as it is under a bell-glass shrine, I saw it as well as possible. It is supported by two twisted silver wires, springing out of a gold lotus flower. It is not a human tooth, and, I should say, not a tooth at all. But some people say it may be a crocodile’s. It is quite straight, and, people say, a little flattened, but I did not observe this. It is much discoloured.

“Such as it is, it is (if genuine) the most venerable relic in existence, and an object of intense veneration to one-fourth of the human race. It is kept in seven shrines, one over the other, behind enclosures of iron three or four deep, in charge of a regiment of priests in yellow robes and shaven heads, many of whom spoke a little English.

“After we had seen this and some other curiosities and the sacred books, we went to a lofty balcony, from whence we could survey the whole surging crowd, and looked over thousands of cocoa-nut oil lamps, and the elephants were drawn up in the lane below. At a given signal they all trumpeted three times, the old ones with a deep bass roar, the young ones with a more or less shrill treble. So wild and strange a sight I never beheld. We got home, dead tired, about half-past twelve. By *home* I mean the old palace of the Kings of Kandy, which adjoins the temple.

“I forgot to mention among the curiosities an exquisite sitting figure of Buddha, about two and a half inches high, cut out of an emerald. I had it in my hand, and held it to the light. I was about to put it to my lips to be sure it was not paste, but luckily recollected myself. It would have been held as an act of veneration. However, I treated the relics with every respect short of that, which was more than some ill-natured people did.

“Next day being Sunday, we all went to morning church, and the bishop gave us an excellent sermon. The collection was for the Kandy Mission, and he was much gratified by the Princes sending him, after service, ten pounds for the offertory.

“In the afternoon we all returned by special train to Colombo, to be ready for an early start to the kraal.”

“THE KRAAL.

“This is a large enclosure in the middle of the jungle, about thirty miles from Colombo. We drove in two stages, starting at daylight, as far as there is a road, then were carried by coolies in chairs the

last two miles, by a track cleared in the bush for the purpose. Sir James Longdon had marked a bungalow for us. Some of our luggage was sent on on Friday, some was brought on by coolies. The bungalow is made of bamboo, the walls plaited palm leaves, floor dry sand, roof thatch. There are about ten of these for the Governor's guests, and a perfect town of less luxurious shelters for the rest of the world.

"The bungalow for the Governor, Lady Longdon, and the Royal Princes is a much more palatial structure, fit for the Arabian Nights, but equally Singhalese, and most effective in its decoration.

"As I said before, it poured with rain last night, and one herd of elephants broke out, otherwise we ought to have been at the stand at daylight, and have seen them driven in. It kept on raining until 9 A.M., and now we hear that they cannot be collected before 4, if so soon. All the camp is idling about—natives, coolies, moormen, sailors, police, ladies, admirals, generals—a most miscellaneous crowd.

"Two tame elephants have just been brought up for the Princes to mount; wild 'shaves' fly about. We only know that we are here for two nights more, and hope we shall catch our elephants. Annie draws flowers, we have books, and are quite happy to wait. The paths about are too steep and too crowded to tempt one out much. We dine with the Governor, but breakfast and lunch at a scratch mess of officials, diversified by naval officers. The admiral is our immediate neighbour. Montague Borrows has a son here, of whom I hear a high character.

"The bush abounds with wild scarlet ixora, a climbing yellow hibiscus, a conceited plant that calls itself *Gloriosa superba*! a wild gloxinia, etc., etc. We have plenty to amuse us, and our German Professor Hückell, to whom we have given our fourth room, draws also. . . ."

"COLOMBO, *February 2nd.*

"The kraal came to an end last evening, when the Princes left it, after seeing several elephants, some said five, others seven, successfully driven in, but a much larger herd had not been got in. We were in the stand, off and on, from half-past 6 A.M. to about 5 P.M., looking down on an impenetrable jungle, with two herds of elephants and over 1,500 beaters slowly approaching, hearing their shouts, and agitated by a hundred baseless rumours. Sometimes one of the elephants would try to bolt, and immediately an outcry, as if from a hundred packs of wolves, would arise all round the valley. The elephants were dead beat, and often would not stir for a long time; then they got them on a little. They were for hours so near the entrance that Prince George joined the beaters—still they would not

walk in. About half-past four we had a diversion. Four huge tame elephants were brought in to break down the jungle round the stand, and it was wonderful to see them do it. The trees were drawn up by growing close together, and although very tall, few of them were over eight inches through. The huge beasts would put their heads against them and fairly butt them down with a crash, sometimes using the trunk or a foot, or they would curl their trunks round an immense armful and lay them all together. The drivers guided them through and through the thickest places until there was a comparative clearing, littered only by many feet of boughs and foliage, which they stepped over with great ease.

"I should have mentioned that an hour or two before this operation was thought of a louder and more continuous roar than usual informed us that the elephants were in, and we had seen several through the foliage within twenty yards of us. Just as it was getting dusk we saw three tame ones hustling an unfortunate wild one, and they tried to tie him, but the bamboos were so thick that we could see nothing, and we heard that he got away.

"It was very pretty to see the tame elephants testing the ropes by straining them with all their strength.

"After all, the herd broke out last night, all but two young ones. We left the camp this morning, Annie and Maude on chairs carried by four coolies, myself on foot."

"DIMBOLA, CEYLON, *February 8th*, 1882.

"It is pouring with rain up at this hill station 4,000 feet above the sea, and our walk to a waterfall two miles off is likely to be made impossible, so I will take advantage of the opportunity to write.

"This coffee and cinchona plantation is about forty miles from Kandy, and fifteen from Neur 'Elya, the sanatorium of Ceylon. All the hills in view are stripped of their natural jungle, and covered with one or other plant, or both together. They are divided by innumerable ravines and gullies, which are left for the growth of para grass, and abound in ferns and wild flowering shrubs. The soil is a much decayed gneiss mixed with boulders, very steep, requiring much judgment in laying out the drains and catch-water cuttings, which are very close, to prevent the soil being washed down. Paths wind about in every direction.

"Cinchona is taking the place of coffee, and there are many varieties. *C. robusta* is a hybrid, and at present esteemed the best. The trees grow to a considerable size if permitted, but these are young, and seldom over ten feet high. As for the coffee plants, they are kept

low by pruning, and make no show. In general appearance a coffee plantation looks at a distance very much like a vineyard, the plants being about 1,500 to the acre. At present they are much affected by a vegetable fungus called *Hemeleia bastatrix*, the spores of which are blown about by the wind, and when they fall on a leaf send out filaments, which penetrate the tissues, and tap it of all its nutriment. The plant loses its leaves, and becomes incapable of producing healthy fruit. A microscopist, Mr. Marshall Ward, has been two years investigating this fungus, and his reports are a wonderful example of what patience can do with a microscope. He has traced its whole life history, from the spore to the full-grown spore-producing plant, which looks like a spot of red rust on the leaf. The result, meantime, is that coffee-planting in Ceylon is declining, although still its chief industry, and cinchona is coming in; but they also grow a good deal of tea. . . .

“The labourers, Tamils, are paid sixpence to eightpence a day, and spend about half of it in rice. As they wear next to no clothes, their other expenses are small, and they save money to return to Madras. Some are jet black and very ugly, others comparatively fair. The women are profuse in necklaces and bangles, and if very smart, have a small gold button fixed to the right nostril. The very young children are lightly attired in one or more silver bangles. A. and M. are such inveterate baby-lovers that they cannot resist taking the little black imps out of their mothers’ arms. It is as good as a play to see their faces.

“The coffee comes up nearly to the verandah of this bungalow, and you cannot see fifty yards on a level in any direction. Our bath is a tank with a stream of water pouring into it, deliciously cold (but they say that it is very bad for one). The ‘boy’ and his black wife live in a hut alongside. . . .

“All they do with the coffee on the spot is to get rid of the external pulp in a machine; the subsequent ridding it of two skins, called first and second parchments, is done in large factories in Colombo, where they also assort the qualities. It is a very clean product, and you need have no scruple in using it.

“We came by rail to Nawalapitiya, eighty-seven miles, then had a sixteen-mile drive uphill in the most cramped and miserable of waggonettes. It is, however, a beautiful mountain road, and the extreme novelty of everything made the first hour or two very enjoyable; but I was not very well, and got heartily tired of it long before we got in. Every cutting and every rill yielded ferns which are choice in greenhouses at home—the most common a *Gleichenia*

and a *Blechnum*, the young fronds of which were rose-coloured, then a pretty *Davallia*. I daresay we gathered thirty sorts, only to throw them away, as we cannot press them.

"I gave an old gentleman in Colombo a happy morning looking over his collection, not knowing that he was ex-editor of the *Ceylon Observer*, and got a painful puff next day. He is one of two brothers, sons of a Scottish blacksmith, now leading men, joint authors of the 'Handbook of Ceylon.' Truly, for clever, steady, hard-working men of humble origin, the British Empire offers in her colonies paths to fortune and to social elevation which no country ever had at command before. I met them both at Government House, although the *Observer* is rather hostile to Sir James Longdon, who is a well-abused man—why, I know not. I find him very agreeable, and remarkably full of knowledge. . . ."

"SS. 'KHEDIVE,' AT SEA, *February*, 1882.

". . . We left Colombo on Saturday evening, 18th, preferring to travel by night for coolness, the first thirty-five miles by rail, the rest of the way to Galle by coach, which we engaged to ourselves. It was very pleasant, if rather fatiguing—the road through cocoa-nut palms and suchlike all the way, and lighted up by myriads of fireflies. The natives travel chiefly by night, and we frequently passed them on foot carrying flaming torches of Talifat leaves, or driving slow, patient oxen in waggons. We were generally near enough to the sea to see or hear the waves. We finally got to Galle at 3 A.M., and went straight to bed. The *Khedive* was not in, and did not get in before Monday, or sail before Tuesday. We have been lucky enough to get good cabins, and find some people we know on board.

"It seems to be impossible to land in Egypt (on account of quarantine), so we shall go on in the same ship to Malta, and after a few days there go by way of Naples to Rome.

"I am less eager about Rome than most people, from a consciousness how little I am prepared, either by a critical taste for art, or by classical knowledge, to make the best of it. However, I have no doubt that it will be a great pleasure and smooth the way, if our lives are spared, to a longer visit hereafter.

"On arriving at Aden we found that the quarantine had been removed, and we therefore left the steamer at Suez, and proceeded to Cairo by rail."

"CAIRO, *March 18th*, 1882.

"We have just returned from a donkey ride to the Petrified Forest, which is about seven miles from Cairo, reached by the

traditional track of the Exodus. We did not go on far enough to reach the few stumps said to be still undisturbed, but we saw a few trunks buried in the sand, and might have collected bushels of fragments of silicified wood. As you are aware, no doubt, the trees grew at a remote geological age, and owe their exposure only to the material resisting the denudation that has gradually carried away the sand that overwhelmed them. All the surface stones and conglomerates are silicious, mostly an imperfect agate called chert, or hornstone.

“You would be amused to see A. and. M. cantering along on their spirited little donkeys. The road out is through some of the narrowest, crookedest, and most picturesque parts of old Cairo, and past the tombs of the Khaliffs—altogether a very interesting and not very fatiguing excursion, and not very dear either—three francs each and bakhsheish. I find bakhsheish mounts up, however, especially at the Pyramids.

“We have pretty well done Cairo and its vicinity, and I am glad to be assured by travellers from Upper Egypt that we should see nothing finer in the way of tombs than we have seen. Of course we have seen no temples of the highly sculptured class; but the stone temple close to the Sphinx, a discovery of Marriette’s, is as remarkable in its way. It is made of square blocks of granite, some of them fourteen feet long, and without a trace of ornament or sculpture. It is the tomb of Ka-fra, the builder of the Second Pyramid, eight of whose statues were found in a shaft or well within it, and they are of wonderful execution; consequently the absence of sculpture did not proceed from inability to execute it. I have a photograph from one of them which will astonish you.

“We ascended the Great Pyramid, and also went into the interior, to the king’s and queen’s chambers. There is a certain fine line drawn in the passage, which pyramid mystics believe to be the zero line of a scale of marks. The blocks are said to have their joints perpendicular. These joints are most carefully opposite, some stones being a little longer than others. The opposite joint is some inches lower, but adjacent to each is a very fine line perpendicular to the slope of the passage, and these two lines are carefully opposite and in the same place. They are real marks of some measurement, probably connected with finishing the entrance, for they are so near it that you get daylight enough to see them without a candle; but that they have anything to do with prophetic dates few rational people could believe.

“The nicety of workmanship has not been exaggerated. Courses

over 250 yards long are not one-fiftieth of an inch out of level. The smoothness of the great casing blocks, three of which I saw, was tested by applying a plane surface covered with red lead. The touch of the red lead is distinctly visible on the little roughnesses that remain. These stones are ten feet deep from front to back on the lower side, and about six and three-quarter feet wide, and nearly five feet thick. There is a notch in the side of each stone, and the next stone is cut to fit it, so as to break joint. The blade of a penknife cannot be got into the joint.

"I daresay this is all familiar enough, but it is not easy to realize the impression produced by seeing these pure white masses, cut 5,000 years ago and preserved to our day by having been early buried in an accumulation of sand and rubbish. We were lucky in having Mr. Flinders Petrie as guide. He has been for months residing at the Pyramids, in one of the numerous empty rock sepulchres, which he has fitted up in a Robinson Crusoe fashion. He took us direct to everything interesting. You would have laughed to see — and — crawling on hands and knees through the warm sand into some of the tombs. The drawings are much the same as those on the Tomb of Ti, at Saggarah, with traces of more colour, but, having been long known, names are scrawled over them in a shameful way.

"There are noble bulls, each with a very broad scarf of green and red round his neck, ending in some sort of tie (not a bow), with long ends terminated by a green fringe, and this about 3,000 years B.C., nearly 1,000 years before Abraham and Sarah stood before Pharaoh at Memphis, and saw the older Pyramids at least, and a thousand wonders that have been destroyed or swallowed up by the sands. . . ."

"ALEXANDRIA, *March 20th.*

"Here we are, and embark for Naples to-morrow."

"HÔTEL DE PARIS, ROME, *April 4th, 1882.*

"———"

"You are right as to the unapproached interest of Rome. No one could imagine its wealth in everything that appeals to cultivated tastes. Two or three only of its museums and galleries would suffice for the outfit of a capital, and I am supremely glad that we have carried out our plan.

"Since the Italian occupation wonders have been done in the way of civic improvement. It is really a very clean city, and your heart would rejoice to see the large Bible dépôt in the Corso. What sale there is for them I do not know, but there is a window full of Bibles

in all languages. I have not yet made any acquaintance who is *au courant* on local topics. The people at this hotel are visitors, like ourselves.

“We have been to-day to the Musco Tibarino in the old botanical gardens (now quite a wilderness). It contains all the objects hitherto found in the improvements of the Tiber, especially some beautiful frescoes (about the same date as those of Pompeii). . . . Some colossal remains of a bronze statue, once gilded, of Valentinian, and several other more or less mutilated statues in marble, besides whole cabinets of minor objects, altogether a small but very interesting collection, though not so rich as the one of remains found in the palace of the Cæsars. The most valuable *trouvaille* I can hear of is an Egyptian obelisk of very large size, which lies buried under some houses at the back of the Pantheon. They cannot get it out until Government purchases and pulls down the houses. The clearing out the Baths of Agrippa has led to the discovery of some magnificent fragments of a marble frieze and marble columns on a grand scale, which they appear to be about to build into the baths. I admire the spirited way in which explorations are carried on, and the good taste of the restorations. . . .

“The new English church is making progress, although there is not much to show for £6,000 already spent. The Ambassador lays the foundation stone on Easter Sunday. Money seems to flow in rather slowly, but they have two years from January 1st to raise £11,000 in; and I do not suppose that the municipality will be critical if the church is not internally finished by that time, provided the promise is kept to the eye. The funds in hand amount to £4,000 to £5,000, but they have still £10,000 or £11,000 to raise.

“We have been to St. John’s Lateran, and seen the Santa Scala. There were about twenty people of all ages ascending it on their knees, including one or two mere boys. I can understand people under a profound conviction of sin finding relief to their souls in this penitential exercise, but it cannot be from such a motive that the very young are urged to do it, and one’s Protestant reason at once suggests that they are purchasing indulgences to the credit of their account.

“I was disappointed at the absence of any evidence of its great antiquity in St. John’s, and this is still more the case in the splendid emptiness of St. Paul’s *fuore Mura*, a most painful example of misdirected devotion. There was a *Miserere* going on, and not twenty people in the chapel.

“We went to St. Peter’s for the Tembrae on Wednesday—a

beautiful and suggestive service, though we had no books, and could not follow it. The long litany is too noisy and too exclusively a choral performance, in which the priests are nowhere, but the change of key when the last taper is put out, and the plaintive 'De Profundis,' sung by tenor voices, which follows, were very affecting. After all, there was no great crowd, and I easily got as far as the iron gates. About one in half a dozen seemed to be real worshippers, some of them soldiers.

"Miss R. tells me that Rome is full of perverts, who are all very busy. One of them, however, advised her if she felt happy to stay where she is. A certain Father — is the great proselytiser—a big man, of commanding presence and seductive conversation. I recommended her to read Stephen Grellet's life, and she will find where the real saintliness of the Roman Catholic Church is to be found, namely, in humble Christians who in all but profession and communion are Protestants. His account of his interviews with Pope Pius VII. and his visit to the Inquisition are most curious.

"We have visited the Tre Fontane. The hills outside are covered with young plantations of eucalypti, now six or eight feet high, and are being brought under cultivation. Inside the enclosure the trees are as thick as a man's leg, and forty feet high, but not many of them are the true blue gum; they got the wrong seed. However, the effect on the malaria is said to be very marked already. The French Trappists live, and don't die.

"We leave for Florence on Friday or Saturday, and I hope to run to Leghorn on Monday, and to be home the Monday following."

We returned to London in May, 1882, and remained there till 1885. This period was marked by the marriage of Sir Henry Lefroy's younger daughter to Commander Duke Crofton, R.N., and by a visit to Canada in 1884. The British Association met that year in Montreal, and Sir Henry went there as President of the Geographical Section. His wife went with him, and the voyage from Liverpool to Quebec in the ss. *Parisian* was very agreeable, the passengers being all members of the British Association and their friends going to Montreal to take part in the proceedings. A letter to his sister, Mrs. Ernest Hawkins, gives some account of this very pleasant journey.

"HAMILTON, *September 7th*, 1884.

"I have been a very bad correspondent, but my silence has been unavoidable. From the Monday morning that we landed at Quebec to this present Sunday fortnight I have never had an

undisturbed hour, and we shall begin to travel again on Tuesday morning.

“We were one day in Quebec, staying at Colonel Rhodes’, near Spencer Wood. It rained torrents on the Tuesday forenoon, but I had a pleasant walk to Pointe au Fizeau and Sillery on the Monday, and saw a part of the environs which was new to me.

“At 5 P.M. on Tuesday we embarked with the Rayleighs and a large number of Association people in one of those floating hotels on the St. Lawrence, and reached Montreal in fourteen hours, when business commenced at once.

“I had a committee to attend as soon as we had breakfasted, and the following week was one rapid succession of committees, sectional meetings, addresses, garden parties, evening receptions, and what not.

“I left a copy of my address for you. It was very well received, and on the occasion when Lieutenant Greely was announced to read a paper our room was crammed—600 or 700 people. I imagine that the London papers will have better reports of the really interesting papers of the meeting than the local papers had. The reporters generally seemed to have a happy knack of missing what was important, and making great blunders in what they did take down.

“Greely, who is a very interesting person, read us a short but valuable paper, and was enthusiastically received. Among other attentions, Sir J. Douglas, Captain Bedford Pim, Mr. James Glaisher, and myself gave him a *déjeuner* at a cost of £50, and had a large party to meet him. Pim was the author of the thing, the object being to show him such marked attention as would serve in some measure to counteract the set against him made by a party in the United States. It is a shameful thing to make the extremities to which his party were reduced a ground for withholding his promotion. I have had no conversation with him on those incidents, and know nothing more than the papers report.

“The observations and discoveries of the party are of great value, and so also are those of Lieutenant Ray. Mrs. Greely, who is a beautiful young woman, spoke gratefully of the gracious message sent by the Queen.

“One day of our week, or rather forty hours of it, was given up to an excursion to Quebec, and this was the only part of the programme marred by weather. The views were in great measure spoilt completely by rain, but the town gave us a luncheon and the Governor-General a grand dinner, so we could not complain. Lord and Lady Lansdowne are very popular. He spoke admirably. She

is so graceful and attractive that no one could be in the same room with her and fail to single her out among a hundred.

"The concluding ceremony of the week was the conferring of the degree of LL.D. upon about a dozen men, among whom I was included, so that I have at last the right to a cap and gown, the object of my ambition.

"We left Montreal for Toronto by the Canada Pacific Railway on Thursday evening, in a kind of half-and-half Pullman carriage, where ladies were mixed up with gentlemen in a way I thought rather objectionable. It seems that they dare not copy the Pullman too closely. However, I got a good night's rest, and we reached Toronto about 9 A.M. Here ensued more receptions and speech-making, Sir Richard Temple, Roscoe, and myself being the victims. We had each to make a speech in reply. Then we were driven in a boiling heat all over the town, and wound up with a reception at the Lieutenant-Governor's."

After a few days spent at Winnipeg, so wonderfully altered since his visit in 1845, Sir Henry relinquished his wish to proceed to the Rocky Mountains, as he found himself unequal to the fatigue of the journey, and we retraced our steps to Toronto, visiting Chicago on the way. At Toronto he was present at the marriage of his younger son, who had settled in Canada as a barrister, and we took passage in the ss. *Parisian* on her return voyage to Liverpool.

We reached Liverpool on a cold, rainy day, and Sir Henry got very wet on the tender which took us from the steamer to the shore. He took a chill, and was seriously ill in London the next day. We had heard on arrival at Liverpool of the death of his brother, the Rev. Anthony Lefroy, and this sorrow, added to bodily weakness, told upon his strength, and during the winter of 1884-85 he suffered from heart weakness and loss of strength, though he was able to take his part in attending meetings for charitable and missionary purposes, as well as joining in the meetings of the Royal, Geographical and Archæological Societies.

Writing to his sister Lady Rathdonnell on January 1st, 1885, he says :—

"I must not let New Year's Day go by without wishing you many happy returns of it—as many as you desire.

‘Vixi dum volui,
Volui dum Christi volebit’

(‘I lived so long as I desired to live,
I desired to live while it was Christ's will’)

is an old epitaph I am fond of—and I know that it speaks

your feeling. The closing years of life should be years of preparedness.

‘I gave to Hope a watch of mine, and he
An anchor gave to me,
With that an old prayer-book I did present,
And he an optic lent.
With that I gave a vial full of tears,
And he a few green ears.
Ah Loiterer ! I’ll no’ more, no more I’ll bring,
I did expect a ring.’

I think that the most perfect allegory in the language. Read it who can.”

In March, 1885, he was struck down by an attack of congestion of the lungs, and for some time it seemed as if his life were drawing to a close ; but his good constitution, cheerful spirits, and complete acquiescence in whatever might be God’s will enabled him, by the mercy of God, to recover some measure of health, and he was restored to his family and friends. In a letter to one of his sisters written soon after this illness he says :—

“Thank you, my dear Anne, for all your kind expressions and good counsel. I cannot say that even in my worst attacks I have felt the least like dying—perhaps people don’t, and are often taken unawares ; but I have known in some measure their danger, and have long contemplated death as under any circumstances not far off. I am very backward in the expression of feeling on subjects of religion. I do not think I cling to this life, and I try to realize ‘the four last things,’ but I have a deep underlying conviction that Christ came into the world to save sinners, not to condemn them, and in that persuasion I commit my soul to Him as to a merciful Creator, and am not very solicitous as to the issue.”

In the autumn of 1885, finding that his health was not returning, we left London and rented a small and very pretty place, Penquite, on the banks of the Fowey, in Cornwall.

Here we made many kind friends, and he enjoyed the quiet and beauty of the country. Writing to his sister on the 27th December he says :—

“I hope Christmas Day passed as happily as the cares of life permit, when hope is almost a thing of the past, and passive thankfulness is the substitute for gladness. We had a very small party, only Tottie Rogers and her husband and Alfred. Mrs. Treffry sent us a large bouquet of winter roses, and we walked to church with the chimes of three parishes pealing cheerfully around us. We have

clear, cold weather, a sharp frost nearly every night ; but sometimes, as to-day, quite a warm sun, when the scenery is beautiful. . . .

“ We have been somewhat comforted as to the present serious outlook in public affairs by reading the new series of ‘ Greville Memoirs,’ in which he describes the conflict of parties, and the utter want of public principle in almost all the political leaders, forty or fifty years ago (except the Duke of Wellington, for whom he had an enthusiastic admiration).

“ Divine Providence overrules human ambition and selfishness to work its ends, and somehow it seems as if infatuation and duplicity were always arrested before they have quite effected the ruin they threaten. If party spirit, pushed to every extreme, is to be the rock on which European Governments will break up, as I sometimes think it will be, we know at least that out of the anarchy a dominion that shall not pass away is to arise, and may possess our souls in patience.”

There is not much to relate of the years 1886 and 1887. They were marked to himself and to those who loved him by frequent attacks of illness always borne with patience and cheerfulness, and entire acquiescence in God’s will. At times he was sufficiently well to spend a few days in visiting, and he always enjoyed visits to Sir Charles Graves Sawle and his family at Penrice, but each attack of illness left him less able to move from home ; and when in May, 1888, it was necessary to move to a new abode, as the owner wished to return to Penquite, it was difficult to find a home within easy reach. Happily we were able to secure a beautiful house only fifteen miles distant, “ Lewarne,” belonging to Lieut-Colonel Grylls, and to this place we moved.

The change of air and the beautiful scenery revived him for a time, and during that summer he was able to take comparatively long rides on his pony, and to attend the beautiful services in the parish church ; but the weakness of heart increased, and during the winter he was constantly confined to his room with attacks of bronchitis. During the summer of 1889 he was perceptibly weaker, and the rides and drives were less frequent ; but his cheerfulness and patience never failed, and he was able to occupy himself and to take a keen interest in social and public affairs. A letter written to a friend who had sent him some papers on socialism will show the spirit in which he regarded this movement.

“ *October 17th, 1889.*

“ MY DEAR —,

“ I do not return your tract on ‘ Social Reformation on Christian Principles,’ because, as it was uncut, I do not doubt that you have a

number of them. I have read it carefully, and so far as it brings Christian principles to bear on the actual fabric of society I have nothing to say against it. It is not Christian, but anti-Christian socialism that I dread—that socialism which, borrowing its strongest weapons and all its light from Christianity, nevertheless pronounces the latter a failure, would substitute some ‘religion of humanity’ for it, and set up a kingdom of heaven from which the King is Himself banished.

“I do not find it implied in the teaching of our Lord or His disciples that ‘the public’ was ever to be the guardian and administrator of ‘land and capital.’ It certainly was not qualified for such a trust in the first century, when it was heathen; I don’t think it has become so since. On the contrary, I learn, what all subsequent experience has attested, that ‘the public,’ ‘the natural man’ as Scripture calls him, is in all ages in a state of antagonism against the Divine law, and therefore not likely to enforce its sanctions. The Church absorbed enormous wealth in the Middle Ages with very slender results to society. Would the State have made any better use of it?

“Your tract appears to me to ignore entirely the existence of moral evil as a factor in society, or only recognises its operation in the rich; that ‘the whole world lieth in wickedness,’ that it is a moral and not a political medicine that it requires, is kept out of sight, and still more the truth which we Christians hold, that the Church is the appointed agent for regenerating the world, and that God the Holy Spirit is her guide. It is the ignoring such considerations as these that seems to me to stamp modern socialism with the mark of ‘the Beast.’

“I cannot admit that equality of exterior advantages has ever been a criterion of a truly Christian community, or that it can be reconciled with the other conditions of human progress. The relations of rich and poor, master and servant, sovereign and subject, are inherent in all organised society. That a pure communism should have had a very brief local prevalence in the Apostolic church (Acts xi. 44, 45) speaks volumes for the fervour of the first converts, but it is not offered as a model to the imitation of all.

“Your writer forcibly, eloquently, and fairly traces the consequences of a universal prevalence of Christian principles, and insists on their power to regenerate society. I agree, and believe that they will in time do so; but it will be God’s time, not man’s. We are nowhere told that virtue and happiness are to be the characteristics of this dispensation; but we are told to look for one to come, when ‘God shall make all things new,’ and there shall be no more curse,’ (the curse of

the Fall). We are even encouraged to be fellow-labourers with God in bringing on this glorious epoch ; therefore my sympathy is with all Christian enthusiasm (even though I think it mistaken in its methods) that wars against the selfishness and excessive luxury and money-worship of this corrupt age. That has been the proper office of the Church from the beginning ; but this is a different thing from assent to propositions that I think misleading and subversive of society. I sometimes wonder that the Socialists do not make more of that wonderful prediction of James v. 1—9, which threatens a social convulsion before the ‘coming of the Lord.’ It had a partial fulfilment probably in the downfall of the Roman Empire and the ruin of the great slave-holding proprietors of Italy, but I do not think it is satisfied yet, and I suspect that the anti-Christian socialism which I dread so much will be the instrument of working out a yet more fearful vindication of the Apostle’s warning. In the meanwhile what are we to do ? I say, each man his own duty. I reject the new gospel and cleave to the old one. Form a more enlightened public opinion, enforce the duties of property, insist on the education of the country being based on Christian morality, cease to favour wealth in the many ways legislation favours it at present ; but do not believe that the apparently slow rate at which, in the Divine Wisdom, light and truth make progress is to be amended by pulling down fences which are our barriers against anarchy, or that vast untried experiments in legislation, carried by bare majorities, are safe instruments for blind and passionate philanthropists to set the world to rights. It has been tried again and again, and always failed. The fatal flaw in ‘Looking Back’ is in my opinion the tacit assumption that man left to himself is righteous and wise, and that we have but to clear away obstructions and equalise advantages to have a reign of peace—the world, the flesh, and the devil being mere imagination. This is not my opinion, and therefore I cannot be a socialist. . . .”

In September, 1889, his brother-in-law, Sir George Rickards, to whom he was deeply attached, died suddenly, and he writes as follows to one of his daughters :—

“You will believe that you and your sisters are much on our minds, and that we heard this morning from Katie of the sudden sorrow that has fallen upon you and upon all the family, with the greatest pain and sympathy. I have walked with your dear father in unbroken friendship and affection for forty-seven years ; his wise counsel and ever-ready and affectionate help in need have been a resource and comfort upon numberless occasions, and I can hardly express to

you what a breach seems to be suddenly made in the home circle of affections and interests by his sudden and unexpected withdrawal from this mortal life, in which they have their rise but not their setting. The short account Katie gives is full of comfort and warning ; comfort in the mercy which spared him lingering pain and failing faculties, and warning that our lamps must be burning, for in such an hour as we think not the Bridegroom comes."

In November and December he was almost entirely confined to the house ; but on Christmas Day he was better, and as the air was mild and the sun shining he ventured to go to church for the celebration of Holy Communion—and he was full of thankfulness for being allowed once more to enter the House of God and there receive the Bread of Life. It was the last time he ever left the house. He did not seem to have suffered from the exertion, and after a short rest he was able to join his wife and daughter and little grandsons at the Christmas dinner ; but early in January, 1890, he became very ill, and from this time he never rallied. He was, however, able to enjoy a visit from his daughter, Mrs. Chevenix Trench, and her husband in February, and to occupy himself in reading and an occasional game of chess, and also to write a paper on and make extracts from the old registers of the parish of St. Neot (which paper was after his death printed by the Society of Antiquaries), and when too ill to write with his own hand, he dictated letters on the subject of the war services of the Royal Artillery, which he thought had not been sufficiently brought before the public ; but his chief occupation and comfort was in reading the Bible, or hearing it read to him. He knew that his life on earth was drawing to a close, and his thoughts turned chiefly to the great change and the Home to which he was going. His faith and trust in the Lord and Saviour who had died for him never failed, although at times he felt with Bishop Butler—"It is an awful thing to appear before the Moral Governor of the world."

The difficulty of breathing increased to such an extent that, as he said one day, "every breath is a labour," and the absence of sleep became very distressing. One morning, when his daughter was standing by his bedside, he said, "I don't think I can stand many more nights like this"; but, immediately correcting himself, he added, "but of course I can if it is God's will."

On Easter Monday, April 7th, the vicar of the parish, whose kind ministrations had constantly cheered and comforted him, came and administered the Holy Communion. My dear husband wished the

servants and our two dear little grandsons to be in the room, adding, "I should like to receive the Bread of Life and then close my eyes for ever." But some days and nights of patient suffering had still to be endured, and it was not until Friday, the 11th, that the call came, and he passed into the presence of the Lord and Saviour whom he had through life loved and served.

His body was laid to rest in the churchyard of Crondall parish by the side of his first wife, and his children placed two windows to his memory in the church. Another memorial window was placed in the church at Shoeburyness by friends and officers who had served under him.

One who knew and loved him writes thus:—

"However plainly autobiography and the letters reveal the character of the writer, they cannot of course convey the personal charm of his presence, which shone out in his bright eyes, his smile tender or mischievous as the mood might prompt, and which was heard in the tone of his voice, and in his hearty laugh of almost boy-like enjoyment of some joke which tickled his fancy. His slight, active figure, quick step, and eager manner gave him always a certain air of youthfulness, even in his latter days. Full of his subject, careless of fatigue, and it must also be added of danger, he would rush off on some quest from which lazier or more cautious spirits shrank. 'I should be sorry to have the charge of that old gentleman,' remarked an acquaintance in Bermuda, who was accompanying him on an expedition and observing the Governor's temerity with anxious astonishment.

"But whatever the subject that came to hand, he threw himself heart and soul into it, so as at once to enliven it with his own spirit. 'Did you ever try index-making? One of the most interesting things in the world,' he once amused a brother-in-law by asking.

"To his intercourse with women his chivalrous nature, his playfulness, his appreciation of grace and beauty, gave a great charm. 'Who said your photograph was flattering? Bring him out and let him die,' he wrote to a niece who had sent him her photograph.

"In return, he inspired women with an admiration and affection, tempered with the respect that the sterner side of his character drew out. His high sense of honour and of duty have been too clearly shown in the preceding pages to need insisting on here. Perhaps it was partly from his Huguenot ancestors that his unswerving spirit descended upon him. If he had lived in the days of the Puritans he would have been among the first to give up home, country,

and ambitions to embark on the *Mayflower* for a country where he could serve God according to his conscience. His reverence for Sunday, leading to what some might consider too much strictness in its observance, was never changed by the later customs of the present day. Those who have heard him read a chapter from the Bible in the military tones of an officer in the army of God, giving the orders of his General, will long remember it.

“There was an absence in his character of all forms of pettiness, vanity, touchiness, spite, malice or jealousy ; the foes he had to fight were of another kind. The lower order of temptations would have no chance with him ; he would have trodden them down as unworthy of a soldier of Christ. Open-handed by nature, if he ever recommended an over-lavish outlay in professional matters, this arose from the zeal and thoroughness which desired to make all departments as good and efficient as possible.

“His refreshing cheerfulness, especially in his own family, sprang from several causes, most of all perhaps from his activity of mind. ‘He has set the world in their hearts,’ says the writer of Ecclesiastes ; and the wonders of the world of nature and of art filled and overflowed Sir Henry’s heart with interest and delight. Life was not a poor thing, nor the world a dull place to him, but a true Wonderland ; and it is the poorer now for having lost so appreciative an interpreter.

“But behind his interest in those things, which in their present form at any rate can be only temporal and of this life, lay always the larger background of the eternal and spiritual. The heavenly horizon attracted his thoughts, his hopes and desires far beyond the near one. If, as we truly believe, he has now carried the same keen and active intelligence beyond the veil, into a wider sphere in which ever more and more of the ‘riches of the wisdom and knowledge of God’ are made known to him, we can picture, though but dimly, what his joy must be, as that wondrous revelation is vouchsafed.”

An eminent lawyer, writing to Lady Lefroy in 1890, says :—

“Sir Henry was a man of high scientific attainments and great intellectual vigour, but these were not the qualities which endeared him to all who came within the charm of his influence, for they are consistent with much that is little and sordid and selfish. His great distinction was that while every inch a man in his courage to do and maintain the right, however unpopular it might be, he was as gentle as a woman and as artless and simple as a child. He stood quite alone in my book of worthies for loftiness and beauty of character. His clear blue eye and winning smile invited confidence at first sight,

and this grew into admiration and esteem, if not into a stronger feeling, as one learned to recognize his transparent candour, his unselfishness, his superiority to everything that was little or crooked, his kindness and gentleness to all, and especially to the young, and his generosity and large-heartedness in all his judgments and opinions. He seemed to bring something of the old chivalry in its best and highest form into a coarse and degenerate age.

"I do not think that anyone could have associated with Sir Henry without being both the wiser and the better for it; and surely no higher tribute could be paid to his worth, for of how few whom we meet with, even in a long life, can this be honestly said.

"For my own part, I shall cherish his memory as long as my own lasts. It is only once in a lifetime one is permitted to know a man of this noble mould."

Another friend writes :—

"Besides the personal and ever-increasing affection I felt for Sir Henry, his society and conversation have always been to me, not merely delightful, but so inspiring and encouraging, showing what a man may be, and thus making one think better of the race and its possibilities. I shall never forget those two last visits which through your kindness I had the happiness of enjoying at Penquite and Lewarne. . . . I would fain hope that these recollections will long remain fresh with me."

The following extracts from the "Memoirs of Sir Henry Lefroy," by Colonel Maurice (now General Sir F. Maurice), Royal Artillery, will fitly conclude these notices :—

"If ever there was a time when the prospects of a brilliant career before a young English soldier seemed hardly to exist it was towards the end of the year 1834. Twenty years had nearly past since the great war came to an end. Universal peace for all time, continual retrenchment of military expenditure, were the orders of the day. Yet, in December, 1834, a young soldier left the Woolwich Academy who, from the time he donned the uniform of a Second Lieutenant at Woolwich to the hour of his recent death in April, 1890, contrived to find for himself ceaseless work such as few men in any profession or calling have ventured to undergo, applied that work to such useful purpose that it lives now, and must in one form or other live for all time, and finally placed his own Regiment, his own great Arm of the service under such obligations as it owes to hardly any other man that ever entered it. Lefroy's services to his country, great

and lasting as they were, were so closely associated for the most part with those which he rendered to his brother officers of the Royal Artillery that in these columns we may be forgiven if it is through his services to us that we look upon all others that he did, and if, while we leave to others a more ample record of his services to the State, we of his own corps recall alike with gratitude and pride that his first and last thoughts were for it.

"In July, 1842, he took over charge of the Observatory at Toronto. In the autumn of that year he started for the wild North-West.

"The object of the expedition was to conduct meteorological observations during the winter at Athabasca Lake and on the Mackenzie River. The words are easily written down; but as no record of what they meant to the little party, of which Lefroy and Corporal Henry of the Royal Artillery were the only Europeans, could be adequately given here, I would refer those, who do not know anything of what the wild winter of those parts of Canada is, to Sir William Butler's brilliant description of the 'Wild North Land.' To travel through such a region with the thermometer twenty to forty or more degrees below freezing point in a country at that time utterly beyond the utmost limit of civilization was trying and difficult enough. To take magnetic observations every hour during the months of Arctic darkness,¹ every two minutes for hours together during periods of magnetic disturbance, was, however, a very different task from the most troublesome travelling. In their very observatory the thermometer could not be kept above zero (Fahrenheit). It is intensely characteristic of Lefroy that during this life of absolute isolation his observations should have been carried out with such continuous and painstaking care that they have been singled out by Continental scientific men as yielding the most trustworthy results, more completely confirmed by the collation of other facts, than any that we have. The purpose with which so distant a northern station was chosen was to determine the position and value of the Magnetic Pole. Naturally, therefore, in all magnetic calculations they have become of European celebrity and world-wide importance. Whenever it has been necessary in any country of the world to refer back to original observations for exact

¹ From October 6th, 1843, to February 29th, 1844, Captain Lefroy and his one assistant, Corporal Henry, at Fort Chipewyan, lat. 59° N. long. 114° W., at the west end of Lake Athabasca, took observations every hour of the 24. For the remainder of six months they took similar observations at Fort Simpson on the Mackenzie River, even further north, lat. 62° N. long. 121° W.—HUMPHRY LLOYD, D.D., D.C.L., on "Magnetism."

determination in these matters, it is to Lefroy's work that to this day men recur as to a standard. Thus, in a report on the Austrian Magnetic expedition in 1872-74, thirty years after Lefroy's expedition, Carl Weyprucht congratulates himself on the fact that he has found his observations coincide with the results recorded by Lefroy, 'a highly trustworthy traveller, and one accustomed to rigorous and exact observations.' So, also, Dr. A. Wykander, in 1880, quotes his method and work as a standard; and, as recently as 1885, Dr. G. Newmayer devoted a Review to a renewed study of the results of Lefroy's Magnetic Survey, appreciating it as highly as any preceding scientific writer; while Dr. Humphry Lloyd describes the work as 'probably the most remarkable contribution to our knowledge of the phenomena of magnetic disturbances' we possess. Considering the conditions under which these minutely accurate observations had to be obtained, there is only one explanation that accounts for their perfection. It was given at the time by his chief, Colonel W. Smyth. 'In Lefroy,' he said, 'you have a man of an energy that nothing can daunt.'

"His work and his services were so various and numerous that a short record of them tends to degenerate into a mere catalogue. Fortunately, however, those for whom he chiefly worked and strove are so familiar with the results which have followed from each of them that it is needful only to point out to whom it was that we owed each of this extraordinary list of benefits. If this short and bald memorandum of them should arouse the gratitude and excite the emulation of the younger officers of the great service to which his heart was throughout life devoted, that gratitude will be the reward for which more than any other human recognition he would have cared; the effects, produced by that emulation in following his noble career, will be a renewal in the days hereafter of those services which, whilst he lived, he never ceased to render to the Army, and more especially to the Royal Regiment of Artillery—the object of his ceaseless devotion and affection."

THE END.

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